R&D Programs and Support Initiatives
Policy Handbook

December, 2017

RESEARCH & DEVELOPMENT DIVISION
HIGHER EDUCATION COMMISSION
PAKISTAN

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Research and Development Division

Overview

The Research and Development Division supports research activities in all public and private sector Universities/DAIs eligible for public funding. The R&D programs aim at strengthening the research culture in Pakistani universities by providing funding opportunities for research including support for presentation of research papers at national and international level academic events. The Division especially encourages and supports establishment and promotion of collaborative linkages with universities, industries and R & D organizations both within the country and abroad. Likewise, the R&D Division supports universities for repair/maintenance of their lab equipment, with an aim to strengthen research infrastructure of the universities. The Division under its initiative on Innovation & Entrepreneurship supports the establishment of Technology/Business Incubation Centers and Offices of Research, Innovation and Commercialization (ORICs) at universities enabling them to play their due role in job creation and economic development of the country.

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1.   National Research Program for Universities (NRPU)

Program # HEC/R&D/NRPU/P-001

Application Form # HEC/R&D/NRPU/

F-001

Approving Authority:

Overview

Dearth of research literature / hi-tech lab equipment is a major impediment to the productivity of many creative and talented faculty members/researchers in universities/degree awarding institutions. In most cases, the researchers also require substantial financial support in pursuit of their research initiatives/objectives. In the absence of such facilities, the researchers, specifically the younger ones, are discouraged and are forced to seek better opportunities in developed countries.

To meet the current challenges of researchers working in local universities/DAIs of Pakistan as also to further promote the R&D culture, the Higher Education Commission (HEC) has, inter alia, initiated a National Research Program for Universities (NRPU) as per researcher's needs/requirements.

Program Objectives

- To meet current challenges/ requirements of researchers working in local Universities/ Degree Awarding Institutes (DAIs) of Pakistan.
- To promote research & development activities in local Universities/ DAIs of Pakistan in all disciplines.
- To promote scientific research in areas relevant to national needs.

Eligibility Criteria

- The Principal Investigator (PI) has to be a full-time regular faculty member (BPS or TTS) or on contract for not less than the project life.
- PI must have an advanced academic degree (PhD or M.Phil. /MS) & relevant experience of working as an academician/researcher but not as an administrator.
- Period of execution of the Research Project should not be exceeding three (03) years.
- PI can execute or submit only two (2) research projects simultaneously under any of the HEC funded research grant programs either under NRPU or any other program including those ongoing, submitted or under review.

Eligible Universities/Institutions

All full-time regular faculty members & researchers (BPS or TTS) or on contract for not less than the project life at all public sector universities and following selected private sector universities/DAIs:

- GIK Institute of Engineering & Technology, Topi
- Aga Khan University, Karachi
- Lahore University of Management Sciences, Lahore
- National University of Computer and Emerging Sciences (FAST), Islamabad
- Indus Institute of Higher Education, Karachi
- Institute of Business and Technology, Karachi
- Foundation University, Islamabad
- Riphah International University, Islamabad
- University of Management Technology, Lahore
- Zia ud Din University, Karachi
- The University of Faisalabad
- Institute of Business Management, Karachi

- Dadabhoy Institute of Higher Education, Karachi
- The University of Lahore
- Beaconhouse National University, Lahore
- Iqra University
- Shaheed Zulfikar Ali Bhutto Institute of Science & Technology (SZABIST)
- Forman Christian College, Lahore
- Sarhad University of Science & Information Technology, Peshawar
- Baqai Medical University, Karachi
- Isra University, Hyderabad
- Hamdard University, Karachi
- Jinnah University for Women, Karachi
- Sir Syed University of Engineering and Technology, Karachi
- University of Wah, Wah Cantt
- National College of Business Administration & Economics, Lahore
- Textile Institute of Pakistan, Karachi
- Karachi Institute of Economics & Technology, Karachi
- HITEC University, Taxila

Application Requirements

The applicants will submit their research proposals online through HEC web portal (http://eportal.hec.gov.pk) on or before the deadline announced by HEC. Following documents are to be attached with the application form at the time of submission of the research proposal:

- One (01) set of original hard copy of prescribed Application Form (Annex I) duly filled along with soft copy must be submitted to HEC through the Office of Research, Innovation and Commercialization (ORIC) / Research Office/Office of the Registrar of the respective university of the PI.
- Detailed CVs of PI and all Co-PIs
- Turnitin report of the proposal.
- A clearance certificate from the Institutional Bioethics Committee (IBC) of the university/ DAI, if required.
- A brief on the impact of proposed research.
- An industry support letter, if required
- A letter of consent from the collaborating partner/agency expressing willingness to collaborate.
- One page summary of each project of PI already executed/ ongoing/ submitted for consideration to any funding agency.
- Original invoices / quotations for permanent equipment costing over Rs.0.1 million.
- Year-wise tentative schedule/program of all local visits under the project (if study involves field survey/field work) with details of all expenses including rates and justification.
- Project activities on Gantt Chart.
- Copy of appointment letter of the PI.

Guidelines for ORIC/Research Office/Registrar Office

- The Principal Investigator (PI) has to submit one complete set of original hard copy of the proposal duly signed from all relevant authorities of the university along with soft copy of duly filled Application Form to HEC, through the Office of Research, Innovation and Commercialization (ORIC)/Research Office/Office of the Registrar of his/her university.

- The ORIC/Research Office/Office of the Registrar of the respective university will ensure while receiving hard & soft copy of the proposal from the PIs that original relevant documents are attached with, in line with the checklist.

- Furthermore, ORIC/Research Office/Office of Registrar of respective university will compile basic information of all research proposal(s) of respective university in a single MS-Excel

Sheet, as per enclosed template and will make it available along with complete record of all the proposals to HEC.

- The ORIC/ Research Office/Office of Registrar will ensure that same online system generated project ID# must be allotted to each of the received research proposal (hard copy & soft copy) and on MS-Excel Sheet so that same proposal may be traced in hard/soft form using MS-Excel Sheet.

- After doing all needful, the ORIC/Research Office/Office of Registrar will send a complete bundle consisting of all the Research Proposals from their respective universities (one complete set of duly filled original hard copy & soft copy each), along with complete record of all the proposals in a single MS-Excel Sheet –via surface mail/Special Messenger– to Director (R&D), HEC on or before the **deadline** announced by the HEC.

Financial Provision:

HEC provides funds as per the following details:

- The research grant will normally be provided for a period of one to three years. However, there is no restriction on the lower limit.
- Maximum funding under NRPU may be up to Rs. 20 million.

However, permissible limits of HEC with reference to the cumulative Impact Factor of the Principal Investigator are as follows:

For Physics, Chemistry and Biology	
Impact Factor	**Eligible Amount** (Rs. in Million)
100 or above	20
50-99	17
20-49	15
10-19	12
0-9	10
For Remaining Disciplines	
Impact Factor	**Eligible Amount** (Rs in Million))
50 or above	20
25-49	17
10-24	15
5-9	12
0-4	10

- Lab equipment, chemicals/glassware and accessories as per requirements of the project, with justification.

- Journal Publication fee/online material: maximum up to Rs. 50,000/-

- Studentships for MS/M.Phil. Students @ Rs 20,000/- per month and for PhD students @ Rs. 25,000/- per month are admissible.

- Local Travel-maximum Rs 0.2 million per year or as per actual expenditure if field work/survey is involved; Moreover, students would be allowed only to reimburse actual expenditure incurred during their field visit, if any (Tentative schedule of visits for all the years of project life along with rates/calculations as per actual expenditure)

- Secretariat Staff (if required) @ Rs 18,000 per year

- Stationery/Contingencies @ Rs 10,000 per year.

- Entertainment of any type is not allowed.

- Audit/Accounts @ Rs. 20,000 (maximum)

- If ORIC is fully functional and notified as per as per HEC criteria, university overhead is permissible @ 15% of total direct cost to meet office support and utilities etc.

- If ORIC is not established as per HEC criteria, university overhead is permissible @ 02% of total direct cost to meet office support and utilities etc.

- Other specific requirements depending upon the nature of the project if fully justified.

- Honorarium for PI @ Rs. 38350/- (Lecturer), @ Rs. 59210/- (Assistant Professor), @ Rs. 69090/- (Associate Professor), @ Rs. 76720/- (Professor) and @ Rs. 82380/- (Meritorious Professor) i.e. one month initial basic pay of scale per year whether PI is working on BPS or TTS.

- Honorarium for Co-PI @ Rs. 38350/- (Lecturer), @ Rs. 59210/- (Assistant Professor), @ Rs. 69090/- (Associate Professor), @ Rs. 76720/- (Professor) and @ Rs. 82380/- (Meritorious Professor) i.e. one month initial basic pay of scale once in entire project life whether PI is working on BPS or TTS.

- If a university teacher is working as PI or Co-PI in more than one project, he/she may get only one month's Initial Basic Pay under any one of his/her projects as honorarium.

NRPU Policy Points

- No foreign payment could be made either to any foreign Firm for the purchase of any item/equipment etc. or to any foreigner (as Co-PI)/consultant etc.

- International travel is not allowed under NRPU. However, PI may go abroad if he/she is funded/supported by a collaborating partner.

- TA/DA is not allowed to any of the PI, Co-PI and student etc.

However, travel expenditure as per actual may be claimed under head 'local travel' but maximum up to Rs 0.2 million per year per project.

- Any type of food/entertainment expenditure may not be demanded in the budget of NRPU.

- Studentship is allowed only for M. Phil./MS/M.Sc.(Hons)/PhD students.

- No research associate/research assistant/field assistant/field surveyor or any supporting staff etc. can be engaged other than studentship in the project.

- Daily Paid Labor (DPL) can be demanded for a specific time period and may be hired at university rates if justified under the proposal.

- Secretariat Staff (if required & justified by PI) is allowed @ Rs18, 000 per year.

- No coordinator/consultant is allowed to be hired as it is the responsibility of PI/Co-PI.

- The total amount of the project would never be exceeded beyond Rs 20 million in any case.

- Next installment is released after deducting previous unspent amount reflected by PI in his/her audited expenditure statement submitted to HEC.

- PI must make all expenditure in accordance with the Government rules/regulations such as PPRA rules.

- All accounts of these funds shall be maintained as per Government rules and are subject to audit.

- If a university teacher is working as PI or Co-PI in more than one project, he/she may get only one month's Initial Basic Pay under any one of his/her projects as honorarium.

Funds Award Criteria

Research grants are awarded on competitive merit for high-level and promising scientific research projects to be carried out in Pakistan by university teachers. HEC has designated focal points in all disciplines / sub disciplines. They are the top experts in their respective areas. Their TOR's are:

- Focal points (FPs) are nominated / selected for a period of 3 years on the recommendations of Executive Director/Chairman, HEC.

- HEC may get Research Proposals reviewed on Review Report Pro-forma (Annex-II) directly from three potential reviewers as well.

- Focal Points get research proposals evaluated by at least three experts.

- Focal Points do initial screening of the projects sent to them by HEC.

- Focal Points / reviewers can reject the project at their level if a project is not found suitable for funding.

- Comments of Focal Points/ reviewers are considered as final, i.e. accept or reject in current form.

- Approval policy: if any two reviewers accept a proposal in current form with a total score of minimum 50, the proposal is recommended for approval.

- Decline policy: if any two reviewers reject a proposal in current form, the proposal is rejected for funding.

- Each reviewer is paid Rs.8000/- as a token of their valuable contribution to review the research proposal as per HEC policy.

- Upon approval of the grant, HEC issues provisional award letter indicating the approved amount against each component. The amount must be spent on specified heads.

- An Agreement (Annex-III) on stamp paper will be signed between HEC, the Principal Investigator and the Institution concerned, i.e. Vice Chancellor, Rector etc.

- The host institute must administer the grant according to the Agreement and provide laboratory space, and other facilities necessary for the project. The equipment, material and literature provided for the project through the Research Grant Program remains in the custody of the institute after the project is completed.

- The grantee must keep the HEC properly informed about any applications of the results obtained and acknowledge support from HEC in all publications or presentations. Any research results obtained under the NRPU must be made freely available without any restriction.

- The Project(s) will be cancelled, if PI is not following the terms & conditions laid down by HEC.

- First installment is released to university/DAI after execution of Agreement, subject to availability of funds.

- Release of subsequent installment(s) is subject to submission of annual report by the PI within fifteen days of the completion of each year along with audited funds utilization report (Annex-IV) of the project and satisfactory review of the annual progress report on specific pro-forma (Annex-V) by the expert.

- PI will have to submit research outcomes on prescribed pro-forma (Annex VI) and codal formalities pro-forma (Annex-VII) to close the project as per procedure.

2.   Start-Up Research Grant Program (SRGP)

Program # HEC/R&D/SRGP/P-002

Application Form # HEC/R&D/SRGP/ F-002

Approving Authority:

Overview

Start-Up Research Grant Program (SRGP) is designed to assist the fresh PhD holders to establish research facilities upon joining higher educational institutions as faculty members. The program enables the newly appointed PhD faculty to setup basic research infrastructure to start research activities without delay. The program helps to engage both the faculty and students in research through provision of financial assistance and basic lab/experimental facilities.

Eligibility Criteria

• Applicant must have completed his/her PhD degree within two years from the SRGP application date.

• Applicant must be a faculty member of a Public or Private University/DAI eligible for public funding as per HEC accreditation list.

• Applicant must have joined the University/Institute as Assistant Professor on Tenure Track System (TTS), Interim Placement of Fresh PhD (IPFP), Basic Pay Scale (BPS) or long term regular contract (minimum one year period).

• A faculty member on IPFP or contract needs to apply for Start-up Research Grant within 3 months of his/her joining while the faculty member joining on TTS or BPS may submit his/her application within 6 months.

• A faculty member on IPFP who could not submit an application for Start-up Research Grant may apply for this upon joining as Assistant Professor on TTS, BPS or regular contract.

• Start-up Research Grant will be provided to the applicant only once.

• A faculty member whose application for SRGP has been rejected once cannot apply again.

• HEC scholarship defaulters (foreign and indigenous) are not eligible for this grant.

How to Apply?

• The applicant will fill the application on the prescribed form listed below and send it to the Office of Research, Innovation and Commercialization (ORIC) of his/her university. If such an office does not exist, the applicant must submit the form to the university's Director Research.

• The research proposal must have clearly defined objectives and methodology. The time frame of the research activity must not exceed one year.

• The applicant must note that he/she has only one chance to submit the Start-up Research Grant.

• The application form must be filled in very carefully and be complete in all respects.

- The applicant must attach the following documents with the application:
    - CVs of Principal Investigator (PI) and Co- Principal Investigator (Co-PI)
    - A copy of the PhD degree of PI (English translation if original is in other language)
    - A copy of the appointment letter of PI
    - A copy of the CNIC of the PI
    - Quotation for permanent equipment of worth more than Rs.100,000.
    - List of expendable supplies with complete detail of chemicals.

- Incomplete applications will be rejected and the applicant will not have a chance to resubmit.

- Successful applicant will have to submit a Deed Agreement on Non Judicial Stamp Paper

- Funds will be released upon submission of Deed Agreement.

- Kindly ensure inclusion of HOD comments and stock register entries with mid- term and final reports. No report will be entertained without HOD comments and stock register entries.

- The cases approved before 31st December, 2015 must submit a mid- term report as per the format available on website.

- All the cases approved after 1st Jan,2016 must submit the final report only, ensuring inclusion of the stock register entries of the purchases made and HOD comments

- Only 1 original copy of research application, mid-term report and final report is required for processing. No need to send 3 copies of the said documents.

Terms & Conditions

- Start-up Research Grant is available only once to the fresh Ph.D. degree holder upon joining as faculty member in public sector and private sector university eligible for public funding.

- The maximum duration of the project must be one year. This may be 06 to 09 months for faculty on IPFP or contract while 09 to 12 months for faculty on TTS or BPS.

- The applicant will serve as Principal Investigator (PI) while a regular faculty on TTS and BPS in the host university/institute may serve as the Co-PI.

- A Co-PI can assist simultaneously maximum two projects under SRGP.

- The major cost of the project will be paid in first installment. While the honorarium to PI and Co. PI and university overhead charges will be paid upon submission of the project completion report.

- Release of the first installment would be subject to provision of Deed Agreement between HEC and Principal Investigator through Vice Chancellor/Rector of the DAI/University.

- Principal Investigator will have to submit Deed Agreement duly signed by the Vice Chancellor/Rector to HEC within a period of one month after receipt of award letter. Failure to submit this within stipulated period may withdraw the offer automatically without further notice to PI

- The project funds shall be maintained in a separate bank account to be operated jointly by the PI and Vice Chancellor or on behalf of Vice Chancellor by the Treasurer/Accounts Officer and all

- payments will be made by observing all codal formalities/ rules & regulations of the university & Government.

- The grant received by the PI from HEC will be exclusively utilized for the project as per approved budget.

- All purchases will be made as per prescribed rules of the Government/University where the project is located.

- The expenditure incurred from the grant may also be subject to audit by the HEC and the PI shall produce the books of accounts to the persons(s) appointed for this purpose by the HEC.

- Equipment, apparatus, computers and furniture & fixtures or any other items purchased under SRGP out of the grant given by the HEC will remain the property of the HEC, or with the permission of the HEC, to the University where the project is located.

- Proper stock entries will be made in the stock register of the institution for all items procured under the project.

- In case the PI completes his/her tenure under IPFP, and he/she could not succeed to secure a permanent position at host institution, equipment purchased will be retained in the host institution and the Co-PI will be responsible to complete the research project.

- Any discovery made, patent and/or license obtained based on the research carried out with this grant will be in the name of the HEC and any income accruing there from will be shared by the HEC and the PI according to a formula to be established by the HEC.

- No change in the arrangement for supervision/ execution of the project or in the approved technical program will be made without the written consent of the Commission.

- In all publications and reports generated out of the project, the support provided by the HEC will be duly acknowledged.

- PI will be responsible to submit the project completion report of his/her research project along with expenditure statement duly audited & verified by respective audit/finance division of the host institution and a project completion pro-forma duly singed by HOD/Dean of respective department/faculty with satisfactory comments would be mandatory for final payments as & closure of the project.

- The HEC shall have the right to get project completion reports (progress of research/ investigation/work done by the PI) evaluated through an independent reviewer. This evaluation may include on-site inspections as well.

- Host institution may be asked to submit the expense reports on demand only for cross verifications.

- In case a PI is transferred/appointed in any other institution, the research funds of SRGP including the movable equipment (laptop, computer, equipment, furniture and fixtures etc.) will not be shifted in any case along with the PI and Co-PI will automatically take over the project as PI and would be responsible for remaining project activities till its completion.

- Under such circumstances, Co-PI will not only be responsible for completion of the Research Project at the host institution but he will also have to submit progress/completion reports.

- In case the PI intends to go abroad, he/she would have to inform HEC prior to departure, and Co-PI would automatically become PI and will be responsible for remaining project activities till its completion. In such circumstances, the payment of honorarium will be made to the current PI.

- In case of non-completion of the project within stipulated period, the PI and Co PI will have to reimburse all the funds released under SRGP to HEC.

- In case of unsatisfactory project completion report, the PI and Co PI will be responsible to incorporate the comments and if necessary shall carry out necessary revisions/amendments as suggested by the evaluator at their own expense.

3. University-Industry Technology Support Program (UITSP)

Program # HEC/R&D/UITSP/P-003

Application Form # HEC/R&D/UITSP/ F-003

Approving Authority:

Overview

The program is designed to develop a strong link between university and industry. Through this program, the researchers are given grant for collaborative research with industry. It is an important step towards fostering high level of tangible cooperation between academia and industry for achieving self-reliance through implementation of latest technologies/know-how and international best practices.

Program Objectives

- Help the local industry solve industrial problems, achieve competitiveness and commercialize their products in the global market.

- The research if implemented will boost national economy

Benefits of UITSP

This program has great potential for impact on education and research. Through this program, many researchers have already extended their research work on projects under UITSP up to PhD level and earned their degrees. It would enhance and promote the culture of research in higher learning institutions as well as the industry. It would develop strong linkage with industry leading to commercialization of research output of universities. The R & D projects so implemented would also contribute towards practical teaching as case studies.

Eligibility Criteria

Applicant (Principal Investigator, PI) should:

- have an advanced academic degree and relevant research experience,

- be a member of the national/international professional organization and hold a position in a public University/Institution.

Applications are to be submitted on the 'University – Industry Technology Support Program Form' by electronic mail, along-with five hard copies. Application Form is available on HEC website (www.hec.gov.pk).

Minimum processing time for the application is 02 months.

Purpose and Nature

Proposals under University – Industry Technology Support Program are awarded on competitive merit by HEC for high-level and promising industrial research projects of direct relevance to current needs of the industry to be carried out in Pakistan by creative scientists of public-sector universities and degree awarding institutions in collaboration with professionals from local industry. The purpose of these grants is

to promote scientific research in applied sciences in the country, to strengthen the indigenous capacity for industrial competition in the world market. The grants are given only to the best proposals after a rigorous peer review.

Research Domain

The University – Industry Technology Support Program provides support for research projects in disciplines of industrial importance

Duration

The research grants under UITSP will normally be provided for a period of two years.

Financial Provisions

- Purchase of scientific apparatus/equipment, expendable supplies, specialized literature, on-line literature search and other items needed for the project. The grant covers the honoraria of the Principal Investigator (and co-principal investigator from the industry (preferably with advanced academic degree), and salaries of research associate(s) and supporting staff. It may also cover travel cost within the country for project-related activities.

- The research grant will preferably have a duration of 2 years with a budget of up to Rs 6.0 million where HEC component will be 80% of the total budget and the participating industry will share 20% of the total budget. In very special cases, where the PI has proven track record of applied research or have patents, research proposal with a maximum budget of up to Rs. 8.00 (Eight) million may be considered.

Agreement

After the Research Grant is approved for funding, a written agreement is required between the HEC, the collaborating Industry and the grantee (PI) and his/her institute. The host institute must administer the grant according to the Agreement and must agree to provide laboratory space, finances and other facilities necessary for the project. The equipment, material and literature provided for the project through the University – Industry Technology Support Program remains the property of the university/institute after the project is completed. The HEC Finance Division usually makes the award (first year grant) to the PI's institute in approximately 30 days after the agreement deed is signed and other requirements are formalized.

Progress Reports

- A short annual report is required from the PI within fifteen days of the completion of each year to both HEC and collaborating industry. Progress report should highlight major achievements during the reporting period and completion of targets/goals as envisaged in the project Proposal for the subject year. The release of funds for the subsequent year award is tied up with the receipt and review of the Annual Progress Report. The grantee (PI) is required to submit a Final Report including a financial report within three months of the completion of the project.

- The grantee must keep HEC and the collaborating industry properly informed about applications of the results obtained and must acknowledge support from HEC and the collaborating industry in all publications or presentations. Any research results under this Research Grant shall be the joint property of HEC and collaborating industry based on the proportion as in equity supplied to researcher by the HEC and the collaborating industry. The researchers shall be able to present/publish the results in all types of normal academic publication mediums.

Arbitration

In case of any dispute, related to any matter pertaining to subject research grant, the decision taken by HEC shall be final and binding.

Award Procedure

- Scrutiny of Fresh Proposals, Scrutiny of fresh research proposals received from investigators.

- Review of potential proposals, potential proposals are recommended on the basis of peer review.

- Approval of the Proposal and signing of Agreement between HEC, Industry and the Principal Investigator (PI), if the proposal is recommended by a Committee at HEC.

- Release of first installment to PI, first installment released to PI within 30 days after the agreement deed and other requirements are formalized.

- First Annual Progress/Utilization Report, progress reports sent to Reviewers for evaluation.

- Release of 2nd installment to PI, release of 2nd installment to PI on receipt of satisfactory comments from reviewers.

- 2nd Annual (Final) Progress/Utilization Report of the project, completion report of the project gets reviewed from the reviewer.

- Commercialization of project, succession and role of HEC in promotion of research and capitalization of University-Industry Collaboration.

4. Grant for Organizing Seminars, Conferences, Symposiums and Workshops

Program # HEC/R&D/SEMINARS & WORKSHOPS/P-004

Application Form # HEC/R&D/WORKSHOPS / F-004 A

Application Form # HEC/R&D/CONFERENCES, SEMINARS & SYMPOSIUMS/ F-004 B

Approving Authority:

Overview

Academic events are critical for sharing of knowledge and research among universities and scholars. The promotion of research culture in higher education institutions through Seminars, Conferences, Workshops or Symposia is of great importance to the Higher Education Commission (HEC). To support the development of research culture, HEC provides financial grants to Public and Private Sector Universities (approved for public funding) in Pakistan to organize National and/or International level academic events. Through this initiative, HEC intends to develop a culture of research and knowledge sharing among Higher Education Institutions, as well as establishment of linkages of the HEI's with relevant industrial and corporate sectors.

Program Objectives

• Encourage Universities and Degree Awarding Institutes (DAIs) to organize academic events

• Educate faculty and students with the latest developments in their relevant areas of research

• Provide platform to the academicians and researchers for interaction, exposure and networking

• Provide avenues for sharing of knowledge and research

• Assess academic and research capabilities and achievements at par with the prevalent national and international practices

• Share academic and research achievements with industrial and commercial establishments

• Explore opportunities for domestic and international academic and industrial collaborations.

Eligible Institutions:

• All Public Sector Universities/Degree Awarding Institutions, Centers of Excellence, Area Study Centers, Pakistan Study Centers and the Constituent Colleges of the Universities and DAIs. Colleges affiliated with HEC recognized Universities and DAIs are not eligible for this support.

• Only those private sector universities/Degree Awarding Institutions which are eligible for public funding. For details please: Visit (www.hec.gov.pk/elegibleHEIs).

Application Procedure:

i. To apply for the grant, the following steps will be followed:

ii. The focal person will fill-in the application form with appropriate information and submit the same along with relevant documents 6 weeks (42 days) prior to the event.

iii. Following two types of forms are available;

iv. Application Form for Organizing Seminar, Conference and Symposium – **Annex-A**

v. Application Form for Organizing Training Workshop – **Annex-B**

vi. The application will be duly signed by the focal person and endorsed by head of institution at appropriate section of the prescribed application form.

vii. Supporting Documents will be required with the application form as per checklist.

viii. Universities are encouraged to apply for grant once all the spade work has been completed, the program is finalized and resource persons/invited speakers are identified.

ix. Late or incomplete applications will not be processed.

x. HEC expects that universities may put seed money for initial preparatory work of the event and seek sponsorship from corporate institutions.

xi. The scope of the event should have relevance with the research work being carried out by the department.

xii. Appropriate registration fee from the participants must be charged.

4.4 Supporting Documents Required

i. List of Foreign Invited Speakers/ Resource Persons along with their **CV's** (indicating Academic, Qualification, Professional Affiliation and track of Academic and Professional contributions) **and Abstract of Presentation.** HEC sponsors only those Foreign Invited Resource Persons/ Speakers whose complete details will be provided.

ii. List of local/National Invited Speakers/ Resource Persons along with their **CV's** (indicating Academic, Qualification, Professional Affiliation and track of Academic and Professional contributions) **and Abstract of Presentations** to be presented in the proposed workshop. HEC sponsors only those Invited Speakers/ Resource Persons whose complete details will be provided.

iii. Breakup under Travel Head for the Invited Speakers/ Resource Persons

iv. Brief **CV (2-3 pages) of the Focal Person** organizing the event will be required. **The relevance of academic and scientific contribution of the focal person to the subject matter of the event is very significant.** The Committee constituted against the program, assigns due weightage to the CV of the Focal Person, while considering a funding request.

v. **Brochure** of the event containing Aims, Objectives and Themes etc.

vi. Copy of the **Program** of the event indicating the Sessions, Speakers, allocated timeslots and title of presentation.

vii. List of **Organizing Committee**, preferably comprising of diversified professionals.

viii. List of **publications, stationery items** (*items, quantity, unit rate*). HEC provides funds for consumable items of stationery only.

ix. A list of **Chemicals/ Laboratory Consumables** for on-hand training Workshop.

4.5 Terms & Conditions

i. The grant will be approved for a specific event and cannot be utilized for any other event or purpose.

ii. Financial assistance of Higher Education Commission of Pakistan should be duly acknowledged in all the printed material.

iii. In case of postponement or cancellation of the proposed event, HEC must be intimated immediately.

iv. After issuance of sanction letter, request for change of Foreign or Nation Invited Speakers shall not be entertained.

v. Any expense made against speakers/ item(s) not explicitly desired in the application form or not approved by HEC, shall not be reimbursed.

vi. No reappropriation under the budget heads is allowed.

vii. An applicant/ organizer will be responsible for the proper utilization of the grant as per approved components.

viii. The Grant will be released to the Head of the Institution, requesting funding (Vice Chancellor, Rector, President or Director) upon filing reimbursement claim

ix. The reimbursement claims must be filed within three (03) months after the event, failing which the grant is considered withdrawn, automatically.

4.6   Criteria for Award of Grant

HEC Grant for Seminar, Conference and Training Workshop is highly competitive, and is subject to consideration of the Committee constituted for the purpose. While evaluating an application for the Grant, following aspects are taken into consideration:

- Scope of the Seminar, Conference and/or Training Workshop
- Relevance of the Seminar, Conference and/or Training Workshop to the research areas of the Department/Institution
- Professional standing of Invited Resource Persons and Speakers
- Outcomes of any previous Seminars, Conferences and/or Training Workshops (if any) held by the Department/Institution
- Financial contributions from own/ other sources.

4.7   Financial Provisions:

HEC provides partial support to the Universities/ DAIs to organize Seminar, Conference, Symposium and Training Workshops up to a maximum of **Rs. 1.5 Million** for an International level event; while a National level event is supported up to a maximum of **Rs. 1.0 Million** under the following budget heads:

i. **Remuneration**, **Trave**l and **Accommodation** to maximum of 05 Foreign and 10 National invited Speakers / Resource Persons

ii. **Entertainment** (*working lunch & Tea/Refreshments*)

iii. **Stationery** and **Publication** items (consumable items of stationery)

iv. **Chemicals/Lab Consumables** for Training workshop

v. **Remuneration for Focal Persons**

vi. **Contingencies/ Unforeseen Expenses**

4.8 Reimbursement of Expenditure

a. For approved cases, the sanctioned amount is reimbursed after the event.

b. The reimbursement claims should be filed within three (03) months after the event, failing which the grant is considered withdrawn automatically.

c. The statement of expenditure will be duly audited by the University Auditor and endorsed by the Focal Person/ Organizer and Head of the Institution.

d. The Focal Person/ Organizer (Awardee) will be responsible for the proper utilization of the grant as per approved components

e. HEC sanction is not subject to any change/re-appropriation with regards to approved invited speakers/items/rates etc. whatsoever.

f. Any expense made against items(s) not explicitly desired by the university or considered but not approved by HEC shall not be reimbursed.

g. **The Grant will be released to the Head of the Institution, requesting funding** (Vice Chancellor, Rector, President or Director).

h. The reimbursement claim should include the following:

- Duly filled **Feedback Form (Annex C) & Adjustment Form (Annex D)**
- Payment vouchers/hand bills, tickets (boarding passes, if any)
- Copies of publication/publicity material (indicating acknowledgement of HEC contribution)

HEC expects that the universities considered for the grant will bear some preliminary expenses for hosting the event, and not completely rely on the grant. The Universities may facilitate the Focal Persons by providing the amount in advance, upon request, against the sanction letters to be incurred on the expenditure of the event.

5. HEC Outstanding Research Awards (ORA)

Program # HEC/R&D/ORA/P-005

Application Form # HEC/R&D/BEST BOOK AWARD/ F-005 A,

Application Form # HEC/R&D/BEST INNOVATOR AWARD/F-005 B,

Application Form # HEC/R&D/BEST RESEARCH PAPER AWARD/F-005 C,

Application Form # HEC/R&D/BEST YOUNG RESEARCHER AWARD/F-005 D (S&E),

Application Form # HEC/R&D/BEST YOUNG RESEARCHER AWARD/F-005 D (SS)

Approving Authority:

Overview

The program aims to recognize and reward the achievements of Pakistani researchers/scholars for excellence in research, innovation and publications in all fields of study.

Program Objectives

The main objective of these awards is to acknowledge the high performance of the Pakistani faculty and researchers and thus promote a competitive research culture in higher education and R&D institutions.

Awards' Categories

S. No.	Categories	Amount per award (Rs)	Number of Awards
1	Best Research Paper *	70,000 *	37
2	Best Young Research Scholar	150,000	9
3	Best Innovator	200,000	1
4	Best Book	300,000	9
Total			56

 * Cash Award for Best Research Paper will be distributed equally among all authors of the paper except foreign nationals.

Discipline Wise Number of Awards

S. No.	Discipline	Best Research Paper	Best Young Research Scholar	Best Innovator	Best Book
1.	Natural Sciences	7	1		1
2.	Biological Sciences	7	1		1
3.	Agricultural Sciences	5	1	1	1
4.	Health Sciences	3	1		1
5.	Pure Engineering	3	1		1
6.	Computer Science/Engineering	3	1		1

7.	Social Sciences	5	1		1
8.	Management Sciences	2	1		1
9.	Arts/Humanities/ Languages	2	1		1
	Total	**37**	**9**	**1**	**9**

Eligibility Criteria

- Applicant must be resident citizen of Pakistan.

- For "Best Research Paper Award" applicant should be the principal author (first and/or corresponding author). While award money may be equally divided into all authors, certificates will be given to only principal author(s), except in case of only two authors, where both will receive the certificate.

- In case of foreign collaborative research, affiliation of the applicant on the paper must be with Pakistan.

- For "Best Book Award" applicant must be first or sole author of a Book published by a reputed publisher.

- For "Best Young Research Scholar Award" the maximum age is 40 years on the date of submission deadline. Those who have received this award in the last 5 years are not eligible to apply.

- An applicant can't submit more than one application under the same category in same year.

6.   Access to Scientific Instrumentation Program (ASIP)

Program # HEC/R&D/ASIP/P-006

Application Form # HEC/R&D/ASIP/ F-006

Approving Authority:

Overview

In view of the high cost of acquiring and recurring maintenance of modern, sophisticated and hi-tech lab equipment, the HEC has initiated this program which encourages sharing of scientific instrumentation facilities with researchers. This initiative would enable the scientific community to have access to sophisticated equipment, and use of the equipment would also serve as a source of funding for the institutions which make their instruments available to researchers.

Program Objectives

- Provide spectroscopic, analytical, chromatographic and other services to researchers working in different public sector universities on cost plus basis, which will be paid by the HEC

- Through this program the institutions with instrumentation facilities will get financial resources to optimally utilize their instruments.

- The scientists of Pakistan will have access to available facilities within the country, which will promote research collaboration and save foreign exchange, which is otherwise, required.

Who Can Apply?

The facility is available to postgraduate students (MS/MPhil/PhD and equivalent) enrolled with HEC recognized public sector local universities and admitted as per HEC admission criteria.

How to Apply?

To apply for the facility, the applicant needs to follow the steps given below:

- Applicant needs to apply online for Access to Scientific Instrumentation Program with appropriate information prior to sending the sample to the service provider.

- The applicant needs to submit the application at least 6 weeks prior to sample analysis.

- The applicant must attach one page summary/description of research proposal with the application form. The summary must reflect the total number of samples to be analyzed during the whole research work.

- Endorsement by research supervisor, head of department and Director (ORIC) must be obtained at appropriate section of the prescribed application form.

- The applications will be evaluated and decided by the ASIP Management Committee. The decision of the Committee will be communicated to the applicant within 6 weeks from the date of submission of the application. The decision on the application may be delayed if additional information is required for clarification.

- For all the approved cases, HEC will issue award letter to the applicant.

- Upon receipt of award letter, the applicant may send samples to the service providers for analysis.

- The service provider will analyze the sample and bill to the concerned applicant.

- The applicant will send the bills to HEC along with Result Acceptance Voucher through ORIC office or through Head of Department, where ORIC does not exist.

- HEC will reimburse the sample analysis cost to the service provider upon receipt of bills.

Supporting Documents Required

- One page summary of the research proposal, including the description of analysis required from other institutions.

- Copy of approval of Research Synopsis/Proposal

- Consent of service provider showing rates.

- Brief profile of Research Supervisor

Terms & Conditions

- The application must be filed at least six weeks prior to sample analysis.

- The postgraduate students enrolled in the HEC recognized public sector universities/DAIs and admitted under HEC approved admission criteria are eligible to apply.

- The facility is available to the applicants who do not have analytical facilities at their own institutions.

- The service provider should preferably be from the public sector.

- One applicant may avail grant of up to Rs. 75,000 per annum or otherwise as stated in the research project (depending on the nature of the project).

- The cost will be paid to the service providers upon completion of analysis and upon the satisfactory report from the applicant.

- ASIP Committee may visit the facilities of both service providers and service seekers, to monitor the effectiveness of the program.

Evaluation Criteria

While evaluating an application for funding, following are the major considerations:
- Scope of the research synopsis/proposal

- Facilities available at the university

- Review the performance of the service providers.

- Seek further clarification/information from the applicant (if required)

Reimbursement Claim

- Upon approval of the application, HEC will issue a letter giving its consent to fund the cost of sample analysis. The letter will indicate the approved amount. The amount must be spent only for specified sample analysis.

- For approved cases, the sanctioned amount will be reimbursed to the service provider after sample analysis to the satisfaction of the service seeker (see annex-C for sample result acceptance voucher and annex-D for sample invoice).

- The reimbursement claim should be filed preferably within two months after the sample analysis.

7.   Grant for Repair and Maintenance of Scientific Equipment (MSE)

Overview

Cutting edge research in the higher education sector requires state-of-the art facilities. To ensure that Pakistan's universities have access to the best laboratory equipment and research services, the Higher Education Commission has instituted a special grant program. Under this program, funds are provided to eligible public sector universities and degree awarding institutions for repair and maintenance of scientific equipment. The grants range from Rs. 60,000 to Rs. 1,000,000 per award and applications for this purpose are entertained throughout the year.

Program Objectives

- To strengthen the research infrastructure at universities / DAI's.
- To ensure un-interrupted availability of hi-tech lab equipment to the researchers.

Eligibility Criteria/Terms & Conditions

- Faculty members/scientists from public sector universities/degree awarding Institutions are eligible to apply.

- The equipment applied for should not be older than 5 years.

- The equipment once repaired through this program will not be eligible for a repeat grant in the same financial year.

- The difference between the actual cost of the equipment and the cost of repair should be in the ratio of 30% to 40%, but not over the actual cost.

- Preference will be given to those applying for the first time.

- The equipment should be installed specifically in laboratories and should be used by a substantial number of students and researchers

- The proposal for grant must be furnished on the prescribed form (all columns to be filled in) carrying signatures and the official seal of the respective Vice-Chancellor/Rector of the university or Director in case of a degree awarding institution.

- Furnish separate request for different equipment from the university concerned with details of relevant fault/ problems.

- Pre-Technical / fault report in detail must be attached with quotation provided by the vendor for the university concerned.

- If the related equipment falls on three quotations, three reports from different vendors must be attached separately with the application.

- The proposal for an individual grant should not be less than Rs.60,000 and not more than Rs.1.0 million.

- A department can submit more than one demand but each should be on a separate form and within the above prescribed limits.

- Quotations valid for 6 months from three suppliers/firms registered with GST and NTN department must be attached with each proposal. A sole representative-ship certificate may be attached in case of proprietary items.

- Consumables cannot be demanded under this program.

How to apply?

Universities have to download and submit the application form as given below:

- Application Form

- Fund Utilization Pro forma

8. Patent Filing Support Program (PFSP)

Overview

The HEC encourages intellectual honesty and works to safeguard the rights of the scientist/inventor. Registering an invention in the name of the Researcher as a patent is an exclusive right granted by a country to an inventor. This helps the inventor to exclude others from making, using or selling his or her invention in that country during the life of the patent. Internationally too, most countries now abide by the patent system. The World Intellectual Property Organization (WIPO) applies international patent laws globally through several treaties to secure intellectual property rights.

Keeping in view the importance of patent filing, HEC in July 2006 developed a program through which research ideas, published papers, thesis synopsis or whatever ready to describe potential invention is evaluated for patentability. In case an invention is determined to be patentable the inventor will be encouraged to file for an international patent.

Program Objectives

Securing an international patent serves two purposes; first, it allows the inventor, his/her institution and his/her country to benefit economically from his/her efforts and secondly, mankind benefits from it when a useful application or a product results from the invention. Scientists worldwide make significant contributions to economic growth through such inventions and replication of this practice is intended in Pakistan through this program.

Terms & Conditions

- The eligible scientists/researchers will apply for the funding of their patentable research/invention.

- The parent organization will send recommendation/approval letter of the head of Institute/organization for the PI, along with prior art search evaluation form.

- The recommendation letter should clearly establish and certify the potential market for the invention.

- On the basis of recommendations and market survey, the patent expert will decide whether the patent should be filed provisionally or otherwise.

- The concerned Institution /Organization/ Inventor will search for the business/industrial partner ready to take the patent for further development of provisionally filed patents.

- HEC will file the patent, after approval of the Committee of Experts.

- The patent will be assigned to institution/organization concerned.

- Once a patent is issued to the inventor he/she will be bound to follow his/her Institution/ HEI/R&D Organization's Intellectual Property (IP) Policy. The royalties and any other share will be distributed as per the HEI IP Policy.

- The PI and institute/organization concerned will be bound to report the progress of his/her registered patent and its contribution towards economy and mankind.

- It will be the responsibility of university/institute/R&D organization concerned to commercialize the patent and report to HEC.

- The maximum amount to be paid/ reimbursed for patent fee will be US$6000.

Application Procedure

The procedure for patent funding is as follows:

- The researchers will upload their ideas/research outcomes on website through e-application, with potential market survey report along with the recommendation letter of his/her institutional/organizational Head.

- The experts will evaluate their ideas/research outcomes in light of the market survey provided.

- If the idea is patentable, only then HEC will process its filing.

Release of Fee for Patent Filing

- For filing of patent through HEC, the case will be processed for the approval of competent authority for release of funds after receiving the verified invoice and positive evaluation comments.

- In case the patent is recommended by the committee for funding; a maximum amount, equivalent to $6000/ will be reimbursed after approval. Additional support will be provided for extension and continuation fees, based upon recommendation/approval by the 'HEC- R&D Division'.

9. Establishment of 'Offices of Research, Innovation and Commercialization (ORICs)

Program # HEC/R&D/ORICs/P-009

Application Form # HEC/R&D/ORICs/ F-009

Approving Authority:

Overview

In the present-day world of knowledge economy, new technologies have grown more sophisticated initiating the emergence of more and more high-tech industries. Hence universities where knowledge is produced and disseminated have become more important players in the processes of invention, innovation, and commercialization.

Bringing innovations to market has not been the main historical role of university-based researchers. The university researchers quite appropriately concentrate on basic science. Hence ultimate aim of scientific research is being shifted to improve the human/community and economic conditions of the country.

The ORIC office's vision is to enable and help academic institutions develop an effective technology/knowledge transfer and transformation system. This will enable the transition of Pakistan's Economy to a knowledge-based economy dependent upon innovation and entrepreneurship.

Program Objectives

- Enable research centric environment to ensure development, extension and commercialization of research resulting in the driving force behind research and economic development in Pakistan.
- The Office of Research, Innovation and Commercialization is aimed to link research and commercialization from the University (or universities) with emerging and existing firms across Pakistan and around the world. ORIC works closely with researchers, campus Incubators and future S&T Parks. The office also serves as a conduit to local, regional and federal partners to ensure that research results aid the growth of Pakistan's economy and support community.
- Each ORIC is required to develop mechanism for research commercialization and establish a Business/Technology Incubator to work closely for innovation and entrepreneurship.

ORIC Role

- Research &Development
- Innovation
- Research Commercialization/entrepreneurship

Eligibility Criteria

- All HEC recognized universities are eligible to establish the "Offices of Research, Innovation & Commercialization- ORICs"

- All Public Sector Universities + Private Sector Universities which are eligible for research support from HEC can enjoy the benefits that can be accrued from the establishment of "Offices of Research, Innovation & Commercialization- ORICs"

A. Human Resource (HR strength 10)

- Director (full time)
- Manager Research & Development (full time)
- Manager University- Industry Linkages and technology transfer (full time)
- One Research Associate (full time)
- Three Administrative Assistants (full time)
- One accountant (part time)
- Manager Intellectual Property/Legal Services (full/part time)
- Publication / Communication specialist (part time)

B. Physical Infrastructure (offices 3)

- Temporary building space/Permanent building space
- One office shared by Manager R&D and Manager University-Industry Linkages.
- One office shared by Administrative assistants and Research Associates.
- Office for Director

C. Available Facilities

- The offices must be well furnished and
- Well equipped with necessary instruments/equipment such as Computers / Phone and internet service.

POLICY # HEC/R&D/ORIC/PY- 001

Policy for Offices of Research, Innovation & Commercialization (ORICs)

Introduction

As technologies have grown more sophisticated and emerging industries are becoming increasingly high-tech, universities have become more important players in the processes of invention, innovation, and commercialization.

Admittedly, bringing innovations to the market has not been the main historical role of university-based researchers. Instead, university researchers quite appropriately concentrate on basic sciences. But the ultimate aim of scientific research, after all, is to improve the human condition and so aiding the transfer and commercialization of discoveries serves the interests of the inventor and society. "Since the Industrial Revolution, the growth of economies around the world has been driven largely by the pursuit of scientific understanding, the application of engineering solutions, and continual technological innovation" (National Academy of Sciences and National Academy of Engineering 2006).

Ideally, university structures should support all aspects of this process, from invention to innovation, as well as commercialization. Hence offices of research, Innovation & Commercialization have become responsible for facilitating and supporting the discovery and innovation process on their respective campuses.

As universities become more entrepreneurial and look toward technology transfer into non-traditional fields, there is a need for alternative conceptualizations of technology transfer that are more accurate and realistic than the traditional linear model and that are generalizable to the nuances of the university to which they are applied.

Vision

ORIC′s Vision

To enable and lead Pakistan's transformation to a knowledge-based economy dependent upon innovation and entrepreneurship.

Objective

Grow our research and development efforts and output so as to improve our industry competitiveness using university innovations and becoming the driving force behind economic development for Pakistan.

Responsibilities of the ORIC

The Offices of Research, Innovation and Commercialization are being established to link research and commercialization from the University with emerging and existing Firms across Pakistan and around the world. As an umbrella working closely with the researchers, and on campus Incubators & S&T Parks, the office also serves as a conduit to local, regional and federal partners to ensure research results aid the growth of Pakistan's economy.

Each ORIC will develop its unique mechanism for research commercialization and will establish a Business/Technology Incubator to work closely for innovation and entrepreneurship.
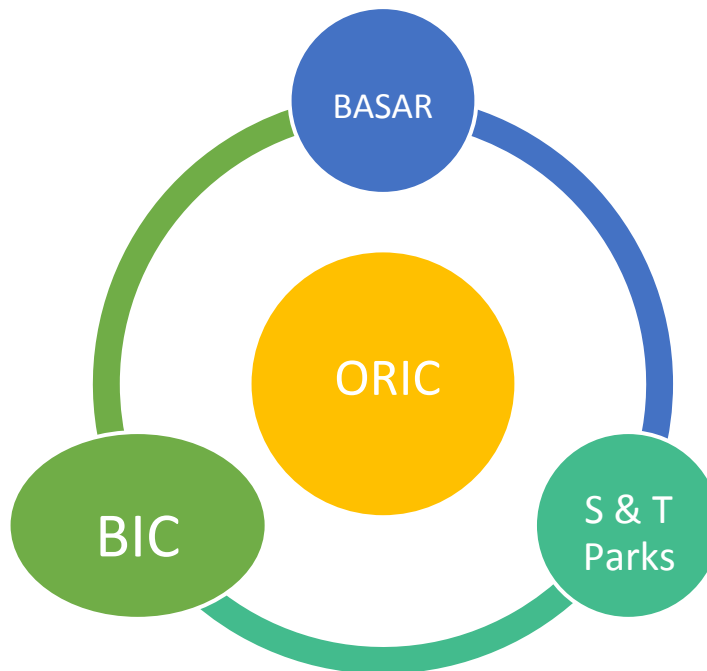
ORIC Role

ORIC consists of three important wings :

a. Research, Development and Operation
b. Innovation
c. Research Commercialization/Entrepreneurship

ORIC activities will revolve around the following research cycle to ensure research impact on economy and society:

Research Innovation Commercialization Cycle

Research Funding → Invention → Disclosure → IP → Commercialization Strategy → Proof of Concept → Prototype → Product Development → License → Market Ready Product and Launch → Incubation → Reach to Market → Research Funding
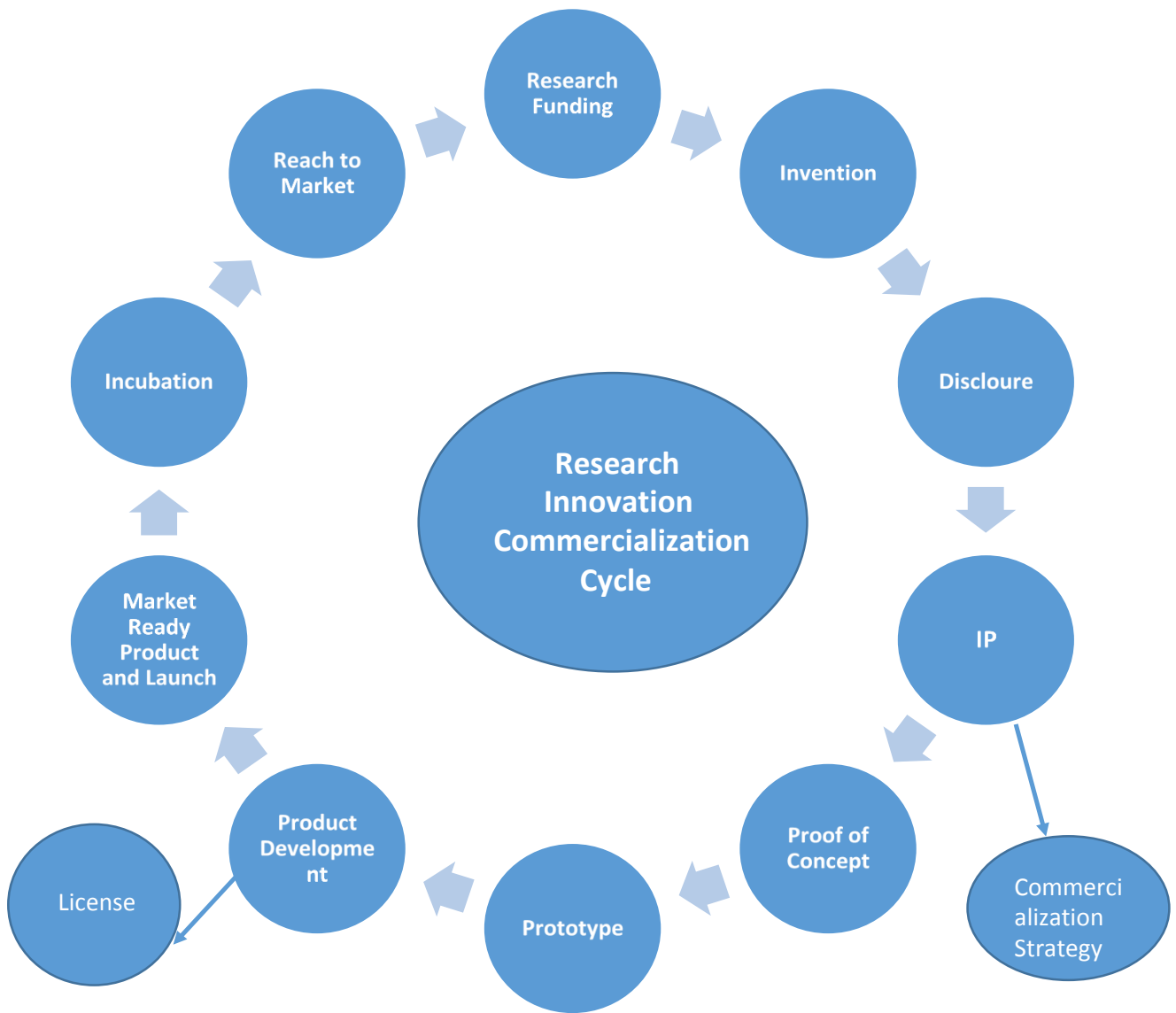
The mechanism for conducive environment and to give strong platform is developed by merging different bodies working in an institute. The Board of Advanced Studies and Research or Office of Sponsored Research will support wing one research, development and operation. While wing 3 will consist upon a Business or Technology Incubators. These incubators will support research commercialization and will provide a platform for university-industry research linkage.

Incubators will be established with HEC support in the institutions where ORIC has shown satisfactory performance, based upon the Score Card, in last two years.

Services Offered

- Fund raising for research

- Provide information to faculty about various available research grants

- Link faculty with relevant industry

- Help and guide on patent filing and licensing

- Interface between faculty and the commercial sector

- Work with patent counsel to assess patentability/licensing

- Evaluate markets for commercialization of inventions

- Identify potential licensees

- Negotiate terms of licenses

- Assist with negotiating problematic sponsored research agreements

- Help faculty start companies

Intellectual Property Administration

- Funding for patent applications

- In-house preparation and filing of provisional patent applications

- Market analyses of university intellectual property

- Data management

- Policy analysis development

- Administrative support

Development of outsource Data Base by the university

Preparation/development of data base of research donors/funding agencies, industrial links, and mentors will be the responsibility of ORIC.

The administrative structure of the Office for Research reflects its key functions:

Director (full time)

Manage and enhance the research activities of the university, develop Research policies and priorities, work for fund raising for research, mobilize faculty, business community and industry for research commercialization and serve as an effective advocate for research with the university and to its broader community of stakeholders and supporters.

The ideal person should have an entrepreneurial mindset and 10 years' relevant experience. Secondly, must have strong ties with the local government, business/industry, entrepreneurs, university and social communities. Finally, proven leadership experience in managing and growing non-profit organizations. He will also implement the strategy and business development plan required to execute program initiatives to enhance the progress of the ORIC. The position also manages the operational aspects of ORIC. He will work in close liaison with the Board of Advanced Studies and Research / Office of Sponsored search, Business/Technology Incubators and University Science & Technology Park (if any) to:

- Monetize royalty streams from licenses

- Draft and monitor department budget

- Oversee IP webpage, in conjunction with the web committee

- Work with Development Office to promote Institute IP success stories. Utilize success stories to leverage commercialization efforts.

- Collaborate with the Principal Liaison for Technical Marketing and Licensing on the commercialization of the Institute's IP in coordination with manager industrial linkage.

    Other duties as assigned.

Manager Research Operations & Development (full time)

The Research Office supports the externally and internally sponsored projects of the institution by providing pre- and post-award support to PIs and ensuring compliance with own institution and sponsor regulations. The person will work in close liaison with the Board of Advanced Studies and Research or Office of Sponsored Research.

- Develop, maintain, and communicate pre- and post-award administrative procedures for externally sponsored projects.

- Support faculty with grant proposal submissions in conjunction with Sponsored Projects Administration (budget development; award documentation; administrative portions of proposals; internal approvals; monitor issues around effort, cost sharing ,space needs, and tuition remission etc)

- Support faculty regarding contracts, progress reports, NCEs, and other sponsor related grant actions.

- Support faculty regarding post-award grant management, including projections, effort allocations and reporting, human resources, consultants, and close-outs.

- Coordinate internal and external reporting needs, including maintenance of HEI's database.

- Develop and maintain the award process web pages.

- Work with the Director of Research Strategy to set goals and responsibilities within the research office and to monitor procedural efficiencies.

- The Manager of Research Development provides overall vision to the institute research portfolio. The focus of this position is to foster collaborations among research faculty across departments and colleges, and to support the mentorship of junior faculty. Develop programs and activities that will increase funding for research from all public and private sources, establish and maintain excellent relationships with donors and stakeholders, oversee proposal development and submission

- Identify a programmatic strategy for research that promotes multidisciplinary collaboration within the university.

- Develop a structure for mentorship of junior faculty.

- Facilitate collaborations among faculty through identifying overlapping research interests and providing opportunities to communicate.

- Provide information about the grant process to faculty including study section procedures, interpreting reviews, and identifying appropriate funding mechanisms.

- Develop and maintain research cores and infrastructure within the institute including web pages, internal grant review procedures, and statistical support.

- Communicate with Development at both university and college levels about research initiatives and strengths.

- The ideal person should have six years' relevant experience working for research and track record of management of research projects, organization for research donor agencies

Oversee all aspects of operation and development of the ORIC including research administration.

(Budgeting, auditing and accounting, human resources, management and maintenance of facilities and equipment, implementation of research contracts and human resources).

Manager University-Industry Linkages and Technology Transfer (full time)

Promote the development of public-private partnerships in support of university research, link the university's research community with the needs and priorities of the corporate sector, develop opportunities for applied research and explore opportunities for technology transfer and the commercialization of university research.

The ideal candidate will have three key attributes: First is a proven track record of entrepreneurship either as a start-up entrepreneur, or working in an environment supporting entrepreneurs. Second, strong ties with the local government, business, entrepreneurs,

university and social communities. Finally, proven leadership experience in managing and growing nonprofit organizations. Six years' experience with Business/industry is mandatory.

Manager Intellectual Property/ Legal Services (full/part time)

He will work and support the university research boards, ORIC and TIC/BIC and will be responsible for:

- Review and analyze all new invention disclosures
- Identify and establish collaborations and/or licensing agreements associated with the Institute's intellectual property.
- Identify potential synergies for University with non-profit research Institutes and academic licensing offices
- Actively license university technology
- Enhance culture of IP capture, including an ongoing evaluation of Institute's research for IP potential.
- Track the success of university technology in the hands of licensees
- Conduct collaborative research agreements review for PIs conducting research under a contract with outside institutions
- Oversee any litigations that may arise related to Institute's IP

Manage any infringement matters that may arise related to Institute's IP

- Monetize royalty streams from licenses
- Draft and monitor department budget
- Oversee IP webpage, in conjunction with the web committee
- Work with Development Office to promote Institute's IP success stories. Utilize success stories to leverage commercialization efforts.
- Collaborate with the Principal Liaison for Technical Marketing and Licensing on the commercialization of the Institute's IP in coordination with manager industrial linkage.
- Other duties as assigned.

EDUCATION AND CERTIFICATION

Law graduate with specialization in IPR

EXPERIENCE AND KNOWLEDGE

3-5 years of relevant experience is required.

Manager Business Incubator: *(position full time apply where ORIC has an incubator for Business Development and Spin Outs)*

Manager Business Incubator will develop an organizational plan and recruit the necessary resources to grow the operation. The ideal candidate will have three key attributes: First is a proven track record of entrepreneurship either as a start-up entrepreneur, or working in an environment supporting entrepreneurs. Second, strong ties with the local government,

business, entrepreneurs, university and social communities. Finally, proven leadership experience in managing and growing non-profit organizations. He will implement the strategy and business development plan required to execute program initiatives that will enhance the reputation of the Incubator. The position also manages the operational aspects of the Incubator Program and works with member companies in aiding them in achieving their goals and objectives. Successful candidates will have an MBA Degree or equivalent with six years relevant experience.

*_incubator will have its separate Frame Work/TORs_

Space Requirements for ORIC

Following Space /offices are required to run these offices:

- ✓ One meeting/conference room
- ✓ Reception area for Administrative assistants
- ✓ One private office for Director
- ✓ One office shared by Manager of research Operations & Development and Accountant
- ✓ One office for Manager of University-Industrial Linkage
- ✓ One office shared by HR officer, publications and communications specialist.

*_Business Incubator or Technology Incubator will have its separate staff & space requirement_

Supporting Staff

3 Research Associates (full time)

3 Administrative Assistants (full time)

1 Accountant (full time)

1 Publication/ Communication Specialist (part time)

ORIC Funding

The Office of Research, Innovation and Commercialization is dedicated to commercialize university technologies - one of the biggest challenges to that mission is funding. To proactively combat the constant obstacle, the office will need to formulate different funding programs for faculty, students and innovators in all stages of the discovery process.

The Higher Education Commission provides initial research funding for faculty to do applied research in their specific areas of work to leverage funds and enhance long-term quality and quantity.

The 15% overhead of all the HEC funded research projects will go to support ORIC functions. While HEC will provide grant for establishment of ORIC in recurring budget under need grant for new initiatives. For establishment of any Incubator under ORIC separate funds will be provided. The approval for establishment of Incubation Center will be based upon the university R&D strength and equitable regional distribution.

*Incubator Funding***:**

Incubators will be funded under a separate framework developed for Business incubation Centers which provides proof-of-concept or gap-funding for faculty members focused on development, testing, prototype construction, or market analysis of innovating technologies emerging from the campus.

To ensure quality the annual assessment of the ORIC office will be carried out on prescribed evaluation form/ Score Card developed for this purpose.

Training for the ORIC Staff

In order to achieve the stated target and objectives, we definitely need to have expertise and require to have trained HRs in ORICs. It is therefore, mandatory to equip the managers of ORICs with the necessary tools and techniques to not only administer the research activities of an HEI but also to contemplate the relevance of research being carried out in universities with the market needs and then to commercialize these research results.

Link of Universities ORIC, Business Incubators and Research Parks;

The University will have an ORIC and Business Incubators which may connect to the network of Research Park, each designed to help faculty, entrepreneurs and businesses collaborate to move innovative research to the marketplace.

Universities Research Parks   key responsibilities:

- Development of strategic marketing alliances with economic development allies regionally and country wide

- Project management, negotiation and execution of ground leases within University System

- Special focus on tech-oriented job creation and commercialization of university based technologies

10. Establishment of Business Incubation Centers (BICs)

Overview

Establishment of Business Incubation Centers at selected universities across Pakistan is aimed at promotion of innovation and entrepreneurship, facilitating technology transfer and encouraging relevant research that can culminate into start-ups. Twenty-one Business Incubation Centers have already been established so far in a phased program incubating over two hundred startup companies where they are being provided with the necessary office facilities, mentorship and opportunities for networking to help them become mature enough before stepping out in competitive economic environment. Every year up to five universities are being supported by the HEC for establishment of these centers in the form of providing two years setup cost, salaries of staff hired for running this center and provision of capacity building opportunities.

Governance Structure

- Business Incubation Center will be run by professional staff having background of entrepreneurship and management of startups.
- It will operate autonomously and governed by a Supervisory Committee/Consortium which will consist of the Vice Chancellor of the University (as Head of the Committee) Director Incubator and Representative of relevant Industry and HEC.
- The Vice Chancellor will assume overall responsibility of the incubator and will send periodic progress reports to the funding agency (HEC).

Role of Director BIC

- Role of Director BIC is critical in success of any Business Incubation Center.
- Ideal candidate for Director BIC position will have three key attributes:
  - First is a proven track record of entrepreneurship either as a start-up entrepreneur, or working in an environment supporting entrepreneurs.
  - Second, strong ties with the local government, business entrepreneurs, university and social communities.
  - Finally, strong financial modeling skills.
- Successful candidates will have relevant degree with a minimum of 8 years of relevant experience related to entrepreneurship or management of similar projects.
- Selection of Incubate Companies:
  - Selection can either be made through choosing top performers in a Business Plan Competition or
  - By regular process of application and scrutiny by the Selection committee. Selection Committee will include:
  - Vice Chancellor of Concerned university

- Director Incubator
- Faculty Member from the relevant field
- Rep. of Industry/Chamber of commerce
- Rep. of HEC

Graduation or Exit Criteria

The incubate company will be graduated out of the incubator once it meets the following criteria:

- Incubate has spent at least 18 months at the incubator. An additional 2-6 months could be given by the incubator management if they feel that the project can be completed by then. In case of further extension requests, beyond 24 months, made by Incubate, the case will be processed by BIC administration for the approval of Vice Chancellor/Director being the competent authority to allow extension on merit if deemed appropriate.
- Incubate has now more than 10 employees and enough revenues to move to other location or has already established a second office for expansion purposes.
- Incubate has successfully developed the prototype and has found an investor or Venture Capitalist to either buy it or take it to the production stage
- If incubate fails to meet the quarterly targets twice in a calendar year
- If the review committee decides that the project is no longer viable
- If incubate violates the tenancy agreement.

How to set up a Business Incubation through HEC's Sponsorship?

The standard operating procedure for setting up of a Business Incubation Center is:

- Selection of universities on basis of extensive research in the area of business and S & T and equal regional distribution across Pakistan
- Discussion with stakeholders/university concerned for the pre-requisites
- Approval of agreement and policy framework for university concerned
- Staff hiring criteria/advertisement of staff and subsequent hiring or posting of staff
- Training of the newly inducted/appointed BIC staff (need identification, Identification of resource person, training module, provision of training)
- Development of Key performance indicators for monitoring of the performance of BIC
- Induction of Incubate Companies at BIC through advertisement or Business Plan Competition at Campus
- Release of funds based on progress Report

11. Pakistan Program for Collaborative Research (PPCR)

Overview

Pakistan Program for Collaborative Research allows for university faculty working in Pakistan to go abroad or for researchers from technologically advanced countries to come to Pakistan. Preference is given to faculty members visiting foreign institutions that have recognized excellence in the relevant research area. The visits can last between one to four weeks but can be extended to more than four months in case of sabbaticals. The visits are limited to one person (the visiting fellow) going to one institute/department in the host institution. The visiting fellow and a person from the host institution (the host) are co-applicants of the proposal.

Program Objectives

The main aim of this funding, which is open to all fields of research, is to initiate or to consolidate international collaborations. To reach this aim, short research activity between the host institution and the visiting fellow should be carried out during the stay. Preference will be given to activities that will support:

*   Submission of papers to peer-reviewed scientific journals (coauthored by the visiting fellow and the host). The paper must be an effort of the joint research work being carried out by the applicants.

*   Preparation of joint research proposals to be submitted for funding bodies. There must be previous communication with the applicant on the matter.

*   Training for lab techniques in Pakistan for postgraduate students.

*   Scientific or academic sabbatical for Pakistani faculty.

*   Curriculum review by the international experts invited by Pakistani universities and/or HEC.

*   Academic consultancy to review processes and procedures in the universities

Eligibility Criteria

*   Faculty members working in HEC recognized public sector universities/DAIs

*   Must hold PhD degree (or equivalent) in the relevant field from HEC recognized universities/ institutes.

*   Must be employed as faculty member in HEC recognized university/ institute and must have at least three (03) year post doctorate experience.

*   **Special waiver of PhD degree to the visiting fellow belonging to clinical medical sciences (who hold terminal degree of MRCP, FRCS or Diplomat American Board) and also to the professionals of Fine Arts, Architecture, Law, and Theatre disciplines with the condition**

that the fellow must have served as a faculty member in HEC recognized university or worked at reputable foreign organization at least for five (05) years.

- Must have good academic and publication record.

- Must have excellent verbal and written English language skills.

- Aim to initiate or consolidate an on-going collaboration between both institutions based on the visit

- Not have already received support for this purpose within the last two years. Even after two years, applications can be subjected to restrictions.

How to apply?

- Proposals must be prepared jointly by the visiting fellow and the host. Anyhow, the Pakistani co-applicant is legally responsible for the project and will submit application to HEC.

- The application must be submitted at least two months before the visit is due to start.

- Apart from other information contained in the application form, the following documents will need to be attached with the application:

  - the complete research plan based on the mutually agreed activities;

  - the curriculum vitae of the visiting fellow;

  - the publications list of the visiting fellow;

  - a letter of confirmation from the director/dean of the host institution;

  - a letter of admission/confirmation from the foreign institution (Academic Sabbatical)

  - a copy of the visiting fellow's last academic degree;

  - a copy of the visiting fellow's passport;

  - the curriculum vitae of the host; and

  - a note to show why a visit is necessary as opposed to using electronic communication.

Evaluation Criteria

The applications will be evaluated based on the following criteria:

- Relevance of the program's aim and proposed work

- Scientific quality of the proposed work

- Research record and experience of the visiting fellow

- Suitability of the host and the host institute

- Complementarity of co-applicants (benefit for each co-applicant)

- Potential for long-term collaboration

Funding Criteria

- For short visit (maximum 4 weeks), living expenses will be paid at the rate of US$ 100 per diem up to a maximum of US$ 2000.

- For academic Sabbatical, living expenses will be paid at the rate of US$ 2000 per month.

- One round trip economy class airfare from origin to destination (HEC defines the region-wise airfares from time to time).

- Visa application fee and health insurance are reimbursed as per actual.

- The host institution will arrange accommodation facilities to the visiting fellow.

- Reimbursement will be made after the visit subject to submission of a satisfactory scientific report, original travel tickets and other necessary documents. If the length of stay is shorter than the foreseen period, the payment will be adjusted accordingly.

12. Social Integration Outreach Program (SIOP)

Program # HEC/R&D/SIOP/P-012

Application Form # HEC/R&D/SIOP/ F-012

Approving Authority:

Overview

HEIs traditionally have kept their focus on providing education only to those who entered their premises to seek knowledge. However, the present-day role of HEIs is fast changing; from pure access to quality, from quality to relevance and now as an equally important additional role, HEIs/Universities are also expected to contribute towards social and economic development.

This specific program is designed to push universities/HEIs to integrate their research and teaching activities to address local issues, by community involvement, to provide on ground solutions. Through this program HEIs/Universities will provide a platform to the local community, in radius of each campus, where problem identification, development and execution of policies will be carried out.

Program Objectives

- To develop closer interaction with Community to solve local problems.

- To build community confidence on HEIs.

- Bridging the gap between two important pillars of nation, Community and Academia

- Develop and enhance the Community- Academia Linkages

Terms & Conditions

The program will be executed through the Offices of Research, Innovation and Commercialization (ORIC). For non ORIC universities, Sociology department or Directorate of Research may lead. The ORIC and Sociology department will identify one specific problem/issue in the local community (in radius of their campus) for possible deliberations/solution. The team will then identify the related department and faculty who can possibly work on the issue. For community interaction/coordination, community centers may be mobilized with the help of community leadership.

In response to HEC annual call, the group may initiate small project(s) on the theme of the call like following, but not limited to :

- Awareness workshops on different diseases/out breaks like; Dengue, Hepatitis, Polio, Tuberculosis etc.

- Awareness programs for local farmers on new farming techniques.

- Construction of small schools, wells, hand pumps, dispensaries (in rural areas) with the help of community.

- Training of community on self-management of disasters.

- Repair and maintenance of sewerage system on self-help bases.

- Repair and maintenance of public parks and play grounds for kids.

- Helping community for establishment of small business like poultry /dairy farms, fast food etc.

- Preparation of business plans/ feasibility reports for community through Universities Business Incubators or Business Schools.

- Linking youth with SMEDA like organizations for establishment of new businesses.

- Help community to prepare proposals for donors funding for community uplift.

- Career Counseling and Guidance

Financial Support

- HEC will provide grant up to Rs.500,000 per proposal

- The University shall have to contribute an equal amount for the proposal

Duration of Program

- Maximum duration of the Proposal is 03 Months which will be counted after release of Budget.

Eligibility Criteria

- All public sector universities are eligible for this program

- Private sector universities eligible for public funding as per HEC P&D criteria.

How to Apply?

- Properly compiled Proposal on prescribed form having (a) table of contents(b) page numbering(c) CVs of HR involved in the project and (d) soft copy

- Approval/Certificate of contribution from University Side

- Activity Plan

Note: *Incomplete application will be rejected and no re-submission will be entertained*

13. Establishment of Technology Development Fund (TDF)

Program # HEC/R&D/TDF/P-013

Application Form # HEC/R&D/TDF/ F-013

Approving Authority:

Overview

Under human resource development program of the HEC, as many as 17,349 scholars have been supported for PhDs through its indigenous as well as foreign degree programs and the program is continuing. Additionally, more than 47 Billion rupees has been invested into purchase of lab equipment and associated research infrastructure at the universities/DAI's. There is therefore, an urgent need to channelize the expertise of qualified researchers towards industrial and economic development of our country in line with the international best practices followed at modern-day universities.

The Technology Development Fund created for the purpose aims at further supporting our researchers through funding opportunities essentially needed for development of prototypes, patent filing, marketing and licensing etc. leading ultimately to successful commercialization of their research. Each project proposal can cost up to Rs 30 million with the completion period not exceeding two years. The successful implementation of the program will help the local industry achieve competitiveness in the international market, which will boost Pakistan's exports.

Program Objectives

Advancement of knowledge	• **Through interaction with the industry and researchers in an academically diverse range of disciplines**
Achieve Excellence	• **Knowledge will be transformed for creativity and entrepreneurship to benefit students, industry and communities.**
Value Addition	• **Use of new technologies will help Business and Industry for Value addition of goods and services**
Apply the Knowledge	• **Extension of knowledge and its exchange with Society and Entrepreneurs**

SOPs

Following SOPs documents have been created for smooth and efficient implementation of the project:

TDF Application Form

TDF Application guideline

TDF Proposal Review Pro forma

TDF Business Model Evaluation form

TDF Grant Award Letter

TDF Contract Agreement

14. Travel Grant for Pakistani Researchers (TGPR)

Program # HEC/R&D/TGPR/P-014

Application Form # HEC/R&D/TGPR (PP)/ F-014

Application Form # HEC/R&D/TGPR (HS)/ F-014 B

Approving Authority:

Overview

Academic events are significant for professional development of researchers and scholars. They serve as a source for guidance, exposure, knowledge sharing, developing linkages, and problem solving. Academic Conferences, Seminars and Symposia provide opportunities for academicians to help understand the latest developments in their field and validate own research findings, while creating opportunities for future academic collaborations.

Such events are the cornerstone of the academic environment. To cultivate this environment, the Higher Education Commission has set up a special Research Travel Grant Program for university faculty and PhD scholars at Pakistani Universities. Under this program, an academician selected to present research work at a national or international academic event, is eligible to seek funding from HEC. Through provision of airfare, this grant also facilitates Pakistanis proceeding abroad to pursue Doctoral and Post-doctoral studies at foreign universities, and for foreign visits under Cultural Exchange Programs.

Program Objectives

- To extend financial assistance to faculty and researchers to present their research work at national and international events.

- To share academic and research experiences and achievements at national as well as international level.

- To share scientific ideas with national/international researchers, get exposure to latest trends and techniques in research.

- To explore opportunities for national and international collaborations.

Travel Grant Categories

Travel grant is extended for following four (04) purposes:

- Presentation of research paper in National and International Conferences.
- To pursue Ph.D. Studies abroad.
- To pursue Post-Doctoral Studies abroad.
- Visit under Cultural Exchange Programs

Eligibility Criteria

- **Presentation of research paper in national and international conferences**
  (Faculty Members**,** Non-teaching University Staff, PhD Scholars **)**

- **To pursue Ph.D. studies abroad**

(All citizens of Pakistan .Registration in a Ph.D. program at any HEC recognized foreign university)

- **To pursue Post-Doctoral studies abroad (minimum duration 09 months)**
  (Faculty members of public sector universities/DAIs. Selection/ nomination against an approved program of the HEC/ Government of Pakistan or an offer/acceptance by an International Agency)

- **Visits under cultural exchange program**
  (Faculty Members of public sector Universities/DAIs. Nomination by the Government of Pakistan under Cultural Exchange Program)

Application Requirements

Duly filled applications are required to be submitted on relevant prescribed pro-forma i.e.:

- Travel Grant Application Form for Paper Presentation (in seminar, conference, symposium)
- Travel Grant Application Form for Pursuing Higher Studies Abroad (Ph.D. and Postdoc studies abroad.

Duly filled application pro-forma, along with supporting documents, should reach HEC at least 6 weeks (42 days) prior to the event date.

Note: *Late and incomplete applications will not be considered.*

Following documents should be enclosed with the Application Pro-forma:

A. For oral presentation of paper

i. Letter of Acceptance/Invitation or email from the organizer in which the mode of presentation (oral/poster) has been clearly mentioned

ii. Documentary evidence indicating that your abstract/paper has been accepted based upon peer-review by the technical committee of the event.

iii. Documentary evidence indicating that abstract / paper would be published in Book of Abstracts/ Proceedings/Journals for the conference etc.

iv. Copy of conference brochure containing aims, objectives and themes, charges of registration and accommodation etc.

v. Full-text paper (both hard and soft copies).

vi. NOC from the principal author (in case the applicant is co-author).

vii. CV of the applicant along with the list of recent publications (2-3 pages)

viii. **Additional documents required for poster presentation:**

ix. List of applicant's publications indicating Impact Factor Score (IFS).

x. The minimum requisite IFS is 20 for Engineering and Agriculture disciplines, and 30 for Science disciplines.

Additional documents required in case of Ph.D. or M.Phil. Leading to Ph.D. scholars

    i. Scholarship award letter/registration letter from the university in which applicant is enrolled.

    ii. Copy of Result Card of GAT (General)/GRE International (Subject)/GAT (Subject).

Additional documents required in case of non-teaching staff of university/DAI;

Copy of job certificate indicating applicant's designation, department, job description and date of appointment / posting along with Copy of MS/M.Phil. Degree

B.   For Travel Grant to Scholars Proceeding for Ph.D. studies abroad

    i. Copy of unconditional admission letter from the foreign University.

    ii. Copy of award letter for scholarship or financial assistance or affidavit about self-finance.

    iii. Copy of highest degree duly attested by HEC.

    iv. Applicant's brief CV (2-3 pages).

    v. Surety bond on Stamp Paper of Rs. 100/- from two guarantors duly attested by the Oath Commissioner/First Class Magistrate (Specimen at Annex-C).

C.   For postdoc studies abroad (for at least 09 months)

    i. Letter of placement in an accredited foreign university.

    ii. Synopsis / Brief description of applicant's research proposal.

Financial Provision

- Airfare (as per HEC policy)

- Registration Fee (up to a maximum of USD 500)

- Accommodation (up to $100 per night)

- Daily Allowance (as per HEC policy)

NOTE: *University faculty members and Ph.D. scholars can avail a maximum of one (01) travel grant within a fiscal year.*

Reimbursement Procedure:

- For approved cases, the sanctioned amount will be reimbursed to the university/institution upon return after attending the event and upon filing the audited expenditure statement duly signed by the applicant, university auditor and head of institution (Vice Chancellor, Rector etc.).

- The reimbursement claim should be filed preferably within three (03) months after the event.

- The university may acquire used air ticket/e-ticket bearing cost of the ticket, original boarding pass counterfoil, original receipt for payment of registration fee of the event

bearing the grantee's name and the actual amount, original receipt of payment for accommodation bearing the grantee's name, duration of stay and the actual amount.

15. National Digital Library Program (NDLP)

Overview

The Digital Library Program launched by the HEC has been designed to provide universities in Pakistan, both public and private and non-profit research & development organizations with electronic (online) access to international scholarly literature based on high quality, peer-reviewed full-text academic journals, databases, articles and e-Books across a wide range of disciplines The e-Books support program allows researchers to access most of the important text and reference books electronically in a variety of subject areas. Around 150,000 number of electronic content has been made available through the Digital Library program.

 Access to the e-resources under the program is presently limited to the institutions and not individuals. All universities, research institutions and non-profit organizations where primary activity is either academic or research can benefit from the program. The sphere of registered institutions is continuously growing and currently over 640 members are facilitated through this program.

HEC now represents all public, private universities/DAIs and research organizations to negotiate licenses with the proprietors and acquire best contents according to the researchers needs.

Program Objectives

1.   Content Acquisition & Development:
    - To acquire the resources according to the national research need
    - To acquire the content on the best quote and minimum annual raise
    - Introducing the best tools/ resources for research for the majority benefits
2.   Promotion and Advancement of research culture:
    - Ensure users' knowledge and awareness of the Digital Library's resources
    - Ensure that users have the right training and skills to use the Digital Library
    - Ensure that users of the Digital Library use the resources to maximum effect
    - Build an institutional research community of Digital Library users and researchers
3.   Technical Support:
    - Ensure availability of requisite resources
    - Ensure secure and ethical use of resources
    - Monitor usage by the member institutions
4.   Research Uptake and Capacity Building:
    - Develop a framework for the research uptake and communication
    - Research-based guidance including preparing and providing guidance for practitioners and policy makers based on research findings e.g. policy briefs, good practice guides, toolkits, literature reviews, research synthesis and systematic reviews

- Establishing an effective communication plan

How to Join?

- The institutions interested in getting the access to e-resources are requested to read the eligibility criteria prominently mentioned on www.digitallibrary.edu.pk and then download and print the Application Form and mail the completed Application Form to HEC for processing.
- The institutions are required to provide NDLP a static IP address to access the e-resources. This is also mentioned in the Application Form.

Liaison and Coordination

- To liaise with NDLP, each institution is asked to provide a contact person. This person, an institutional representative, communicates on behalf of the institution and acts as a focal person to create basic level of awareness about e-resources for its institution.

- Access authentication will be given on the authorized method mentioned in the license , it could be IP-authenticated or shibboleth.

- NDLP ensures that access is provided within the campus on the authorized IP Addresses only. For off-campus access, it is the responsibility of the institutions' IT sections to provide VPN connections to its faculty and students. The institutions are not supposed to charge any fee in this regard.

16. Text Book & Monograph Writing Scheme (TMWS)

Program # HEC/R&D/TMWS/P-016

Application Form # HEC/R&D/TMWS/ F-016 A

Application Form # HEC/R&D/TMWS/ F-016 B

Application Form # HEC/R&D/TMWS/ F-016 C

Application Form # HEC/R&D/TMWS/ F-016 D

Approving Authority:

Overview

The Higher Education Commission has launched this program to facilitate and support researchers and faculty members from public, private sector universities and R&D organizations to promote the culture of research and publishing.

Program Objectives

- To promote the writing skills.

- To provide a platform for writers to explore and share their ideas and information.

- To prepare and establish a solid team of authors at tertiary level.

- To make available low-cost textbooks and reading material to university and college students and teachers.

Eligible Institutions

The researchers and faculty members from HEC recognized public, private sector universities and research & development organizations.

How to Apply?

One set of hard copy and soft copy along with all mandatory documents must be submitted directly to the Office of Director Library HEC, Islamabad.

Mandatory Documents:

Following documents are mandatory to be attached with the application form at the time of submission of the proposal:

- Proposal submission form.
- Bio data form of author.
- Bio data form of co-author, if any.
- Outline of the proposal.
- Developed table of contents of the textbook/monograph.
- Two chapters.
- Turnitin report of the proposal.

Review Process

- Research grants are awarded to the author/s on the recommendations of reviewers. HEC has a list of some top experts in all disciplines / sub disciplines who will review the proposals.

- HEC sends the proposal for review directly to two experts after taking their consent. The reviewer/s may accept the proposal at their level or send it back to HEC for revision. The reviewer/s may also reject the proposal if it is not considered suitable for funding/publishing. In case one report is positive but the other is negative the proposal is sent to the third reviewer.

- Comments of reviewer/s are considered as final decision

- There are two review rounds, i.e. Round-I (For two chapters only) & Round II (For complete manuscript).

- Following are the recommendation options for Reviewers:

Round-I

- Proposal accepted in current form (positive).

- Proposal remarked for revision; needs revision from author and resubmission for final decision (accept or reject).

- Research proposal rejected (negative).

Round-II

- Proposal accepted in current form (positive).

- Proposal remarked for revision, needs revision from author and resubmission for final decision (accept or reject)
  Proposal rejected (negative).

- Following formula is applied for acceptance or rejection of the proposal in both rounds:

i.	Accepted + Accepted	Accepted
ii.	Accepted + Rejected	proposal is sent to the third reviewer.
iii.	Accepted + Revision	(author may be asked to revise and resubmit). If revised proposal is rejected then, same revised proposal is sent to the 3rd reviewer.
iv.	Rejected + Rejected	Rejected
v.	Rejected + Revision	Rejected
vi.	Revision + Revision	author may be asked to revise and resubmit. If both reviewers accept it then it is accepted. If both reject it then it is rejected. If one is positive and 2nd is negative then the revised proposal is sent to the 3rd reviewer.

Award of project

- Award letter will be issued to the writer if two reports are positive in Round I. After issuance of the award letter, the writer is asked to write the manuscript.

- After submission of the manuscript by the writer, same manuscript is evaluated by the same reviewers. Same procedure is adopted as in Round l.
- If accepted in Round ll, then HEC takes further steps for publishing of the Book.

17.   PAK-FRANCE Research Program (PERIDOT)

Program # HEC/R&D/PERIDOT/P-017

Application Form # HEC/R&D/PERIDOT/ F-017

Approving Authority:

Overview

PERIDOT is the Franco-Pakistani Hubert Curien Partnership (PHC) Program providing opportunities to Pakistani and French researchers to interact for joint research activities.

Program Objectives

The objective of this program is to develop new scientific and technological cooperation between French and Pakistani higher education institutions/research laboratories by supporting the mobility of researchers from both sides. The priority areas in 2017 are;

• Health

• Energy

• Climate Change

• Archeology/Heritage

• Water

Eligibility Criteria

• Applicant must hold a research/faculty position at HEC recognized university/HEI.

• The major cost of the project will be borne by the participating universities from Pakistan and France.

• The program will support only mobility of the researchers to and from Pakistan.

• Active participation and mobility of young researchers, especially doctoral or post-doctoral students (enrolled under supervision by the PI) is one of the key objective.

• Each project must be submitted simultaneously in Pakistan France. ☐ The proposals must be signed by the head of institutions as well.

• The host institution must guarantee having the needed capacities (e.g. working space) to accommodate the visiting fellows.

• Maximum two research projects can be submitted by one PI for funding.

• Project life is preferably for 03 years, and will aim at developing on – going collaborations and to generate new ones

Funding Criteria

The funds will be granted on an annual basis, for maximum three consecutive years (till the life of project).

The HEC Pakistan covers;

• Travel expenses of Pakistani Researchers to France @ Rs.200,000/- round trip including inland travel:

- Living allowance to French Researchers in Pakistan @ Rs.5000/- per diem for short stay <= 10 days and @Rs.3000/- per diem for long stay > 10 days up to 3 months

Contribution by the France covers

- Travel expenses to French Researchers to Pakistan, as per French policy (1500 euros)
- Living allowance to Pakistani Researchers in France @ € 110 per diem for short stay <= 10 days and @ € 65 per diem for long stay > 10 days up to 3 months

Submission (How to apply)

- Projects will be submitted on prescribed application form
- Partners will have to submit the project simultaneously in Pakistan and France.
- Maximum two research projects can be submitted by one P.I. for funding.
- CVs of French and Pakistani researchers participating in the project should be attached to the application form.
- Completed application (4 sets/copies) should be submitted.

Focal Points for Linkages

- In French universities: Director of International Relations in the concerned university.
- In Pakistani universities: Director (ORIC), while for non ORIC HEIs, Director Board of Advanced Studies & Research of the university.

Evaluation

The projects are evaluated based on the following criteria:

- Relevance of to the priority areas
- Scientific quality of the proposed research
- Research track and experience of the visiting fellow
- Suitability of the Principal Investigator and the host institute
- Complementarity of co-applicants (benefit for each co-applicant)
- Potential for long-term collaboration
- Impact on economy & society

Selection

- Applications will be assessed and ranked according to their scientific quality.
- Active participation and mobility of young researchers, especially doctoral or post-doctoral students is one of the primary criteria for selection.
- The proposals will be reviewed by the experts.
- A joint-committee will proceed to the final selection of projects.

Monitoring

- The renewal of the annual funding is subject to the submission of a scientific and financial progress report at the end of each year.

- **A joint mid-term report** must be submitted.

- **A joint final report** is required no later than three months after the completion of projects.

- All progress reports will be reviewed by the experts.

18.   PAK – US   Science and Technology Program (STP)

Program # HEC/R&D/STP/P-018

Approving Authority:

Overview

In 2003, the Governments of Pakistan and the United States signed a comprehensive Science and Technology Cooperation Agreement that established a framework to increase cooperation in science, technology, engineering and education for mutual benefit and peaceful purposes between the science and education communities in both countries. In 2005, the United States Agency for International Development (USAID) joined with the Ministry of Science and Technology (MOST) and the Higher Education Commission (HEC) of Pakistan to support the joint Pakistan-United States Science and Technology Cooperation Program. Beginning in 2008, the United States Department of State (DoS) joined USAID as a U.S. co-sponsor of the program.

This program is implemented by the National Academy of Sciences (NAS) in the U.S. and by the Higher Education Commission (HEC) in Pakistan. It is intended to increase the strength and breadth of cooperation and linkages between Pakistani scientists and institutions with counterparts in the United States. Within NAS, the Pakistan - U.S. Science and Technology Cooperation Program is administered by the Development, Security, and Cooperation Unit in the Policy and Global Affairs Division.

Program Objectives

Projects funded under this solicitation should contribute to building research capacity in Pakistan while strengthening U.S. - Pakistan cooperative relationships in one or more of the following ways:

- Enhancing the ability of the science and technology community to spur human and economic development in Pakistan.

- Improving the quality, relevance, or capacity of education and research at Pakistani institutions of higher education in science and technical fields.

- Improving the capacity of Pakistani research institutions to support industry competitiveness.

General Guidelines

Investigators should clearly explain how the proposal, if funded, would facilitate research capacity building at the institutional level in Pakistan. Projects that would only enhance the capabilities of their individual participants, with no demonstrated broader impact, will be considered less competitive and thus less likely to receive funds. Applicants are reminded that priority is given to projects in which the main locus of activity is in Pakistan, not the United States, so budgets should be allocated accordingly.

Prospective applicants are encouraged to review the lists of projects funded in Phase 1 (2005), Phase 2 (2006), Phase 3 (2007), Phase 4 (2009), Phase 5 (2012), and Phase 6 (2015) to gain a better understanding of the types of activities supported under this program, additional weight will be given to projects that demonstrate a clear strategy for uptake or adoption of research outputs, including via further investment by the public or private sectors. Proposal submissions by female principal investigators and projects involving female scientists and students (graduate and undergraduate) are strongly encouraged.

Program Focal Areas

A.   The program welcomes proposals across a wide range of topics, including but not limited to:

Health Security, Environment / Climate Change / Biodiversity, Education, Energy and Renewable Energy, Health/Public Health/Medicine, Social Sciences, Nutrition, Economic Development, Water and Sanitation. Democracy and Governance, Agriculture and Food Security.

A special opportunity for proposals focused on technology transfer, entrepreneurship, innovation, and commercialization is designed. Proposals submitted in response to this special focus area should be designed to build the capacity of university and public sector researchers and technology entrepreneurs to:

- Connect with the private sector to support technology commercialization;

- Identify new technologies with potential market value;

- Scale up a prototype or process for full-scale production;

- Provide training and mentorship on technology transfer, administration, and other relevant functions related to technology development and commercialization.

Special consideration will be given to proposals in the field of education that advance knowledge on how:

- To increase the quality of education in Pakistan especially as it concerns early grade reading; and

- To increase the participation and education attainment of underrepresented populations in the Pakistan education system, including girls and persons with disabilities.

- Private companies may not apply or receive funding, but may participate as partners on projects.

B.   Types of Activities Supported

Applicants may request support for **collaborative research grants**, which may be focused on any topic listed in this solicitation, but the program especially welcomes proposals relevant to technology transfer and commercialization as described above.

Each set of partners may receive no more than one grant.

Although workshops may be organized as part of proposed collaborative research projects, the program does not accept proposals solely requesting support for the costs of organizing a workshop. Researchers interested in organizing such events in Pakistan may wish to consider the opportunities offered by Pakistan Science Foundation or HEC's program of Grants for Organizing Seminars, Conferences, Symposiums, and Workshops at:

http://hec.gov.pk/english/services/universities/GrantsforSeminarConferenceTraining/P ages/Introd uction.aspx

C.   Eligibility Information

i.   Principal Investigator (PI) Eligibility: Proposals are to be developed by partnerships that should include at least one Pakistani partner and one U.S. partner.

Pakistani partners must be based at a HEC-recognized public sector university or a HEC-recognized private sector research funding eligible university (click on following URL to view list) http://hec.gov.pk/english/services/universities/Pak-Us-stcp/Documents/PrivateUniversities-eligible-for-Public-Funding.pdf.

Each PI and each co-PI may only submit one proposal. Previous sub-awardees (PIs) from Phases 1-6 of the program are ineligible to apply.

Projects involving participants from only one country (Pakistan or the United States) are ineligible and will not be reviewed. In developing proposals, proposing partners are urged to take advantage of the widest range of Pakistani talent capable of contributing to the achievement of objectives. In particular, partners should explain in their proposals how they will encourage the participation of women and ensure that they are provided equal opportunities for involvement in the proposed projects, whether as principal investigators, co-investigators, post-doctoral researchers, students, trainees, or workshop participants.

ii.   Topical Eligibility Limit: Due to U.S. government regulations, the program cannot fund research involving "testing or breeding, feasibility study, variety improvement or introduction, consultancy, publication, or training in connection with the growth or production [of a crop] in a foreign country for export if such export would compete in world markets with a similar commodity grown or produced in the United States."

D.   Award Information

i.   Anticipated Type of Awards: Requests for funding can vary in amount and length but should not exceed three years. In order to achieve significant progress towards one of the program objectives, proposals are generally expected to involve multiple individuals (including women and students) and contribute to building strengths of key institutions in Pakistan. U.S. and Pakistani budgets may vary but the total combined budget request should not exceed $500,000 for the life of the project. Capital costs for the construction of new buildings, renovations, and/or purchase of vehicles will not be covered. Quarterly as well as annual narrative and financial progress reports will be required. Continuing-year funding of multi-year projects will be contingent upon a merit-based annual evaluation of progress.

Proposals should include all activities and costs necessary to achieve the results stated in the application. Leveraging of resources is encouraged; therefore, the entire cost of the project should be included. Applicants are required to disclose any other funding received or applied for from other sources that would support the proposed project.

Proposal Preparation Instructions

The text of the proposals should be in single-spaced 12-point type font. Type density, including characters and spaces, must be no more than 15 characters per inch. Type may be no more than six lines per inch. Use standard paper size (8 1/2" x 11). Use at least one-half inch margins (top, bottom, left, and right) for all pages. No information should appear in the margins. Tables and lists in the project description may be in smaller but readable type.

Proposals must be submitted using the required format. Instructions for completing each section of the application form are included below, and the application packet (in Word format) may be downloaded at:

The proposal must include the information requested. Successful proposals will address the Selection Criteria listed in Section VII and will include clear statements of the project goals and explanations of how these goals will be addressed.

1. Cover sheets. Complete all pages making sure all the required signatures are obtained. For planning purposes, August 2017 should be shown as the start date.

2. Project summary (500 words max). The summary should be succinct and clearly state the goals and resulting outcomes of the project. It should be informative to specialists in the same or related fields as well as understandable to a well-informed, non-technical reader. Include the title of the project, the names of the co-principal investigator(s), and the names of the U.S. and Pakistani partner institutions at the top of the page. Include a clear description of the project, stating its specific aims and long term goals. Briefly indicate the unique aspects of the project and interdisciplinary composition (if any).

3. Project description (ten pages max). The project description (sections 3.a through 3.j described below) is limited to the equivalent of 10 printed pages including all figures, tables, and charts but not including lists of additional participants, advisors, and supporters (if any). All applicants must use the standard proposal forms provided. The project description should be prepared with reference to the review criteria and the guidance provided in this and the preceding sections of this solicitation. Incomplete proposals, those not submitted on the standard forms, and those exceeding the established page limits may not be considered.

   3.a. Background and rationale. Provide the background of, and context for, the proposed activity. Where relevant, present a critical and comparative summary review of pertinent literature, justifying the activity proposed.

   3.b. Problem statement. Describe accurately the problems to be addressed and/or opportunities to be pursued by the proposed project.

   3.c. Team experience/capability. Describe relevant prior efforts by applicants to address the problems identified. If you and/or your team have preliminary results, please discuss them in this section. Illustrate how the proposed work will build upon existing expertise, if applicable. Proposals intended to improve the capacity of Pakistani institutions to support technology commercialization or industry competitiveness should also explain the role that industry representatives played in developing the proposal and articulate how the proposed project builds upon other measures undertaken by industry to improve competitiveness.

   3.d. Scope and objectives. Specify the scope of the project accurately and list the specific aims of the project. It is important that the specific aims be compatible with the requested proposal duration. The proposal should demonstrate that a project's objectives are feasible to achieve within the requested project duration.

   3.e. Methods. Describe the project design, conceptual framework, procedures, and analyses to be used to accomplish the specific aims of the project. The proposals should describe a methodology for determining the degree to which a project meets its objectives, both while the project is underway and at its conclusion. If relevant, include how the data will

be collected, analyzed, and interpreted as well as any data-sharing plan. Describe any new methodology and its advantage over existing methodologies. Describe any novel concepts, approaches, tools, or technologies for the proposed activity. Discuss the potential difficulties and limitations of the proposed procedures and alternative approaches to achieve the aims. Describe proposed strategy for encouraging and ensuring the participation of women in the project. As part of this section, provide a tentative sequence or timetable for the project.

3.f. International cooperation. Explain in detail which elements of the project will be carried out by which counterpart involved and why such a division of labor is appropriate both for the project and for the overall program goals of promoting capacity building in Pakistan. Activities should be designed to develop expertise, advance scholarship and teaching, promote reliable, long-term research collaboration between partner institutions. Where appropriate and to the extent possible, applicants are strongly encouraged to include participation by underrepresented groups. Applicants are encouraged to reflect all relevant forms of diversity. "Diversity" should be interpreted in the broadest sense and encompass differences including but not limited to ethnicity, race, gender, sexual orientation, caste, religion, geographic location, social-economic status, and physical challenges. This criterion should be equally important for the U.S. side and the Pakistani side. To be competitive, proposals should demonstrate that the participating institutions are committed to mutual support and cooperation in project implementation. If the proposed partnership would occur within the context of a previous or ongoing project, the proposal should outline distinct objectives and outcomes for the new project and should explain how new funding would build upon the previously funded activities.

3.g. Relevance. Indicate which of the three (may be more than one) program objectives listed in Section IB will be addressed through the project. Discuss the potential for uptake of research outputs through policy decisions, commercialization, or other means.

3.h. Results statement. Clearly and concisely state the final results expected from the activity. The ability of the project to positively impact the goal area should be obvious.

3.i. Additional benefits. Explain any other anticipated scientific, technological, or economic benefits that will accrue to Pakistan besides those already articulated in the Results Statement.

3.j. Executive matters/Budget requirements. Provide a timetable for execution of the project and budget justification. The proposal should explain how project activities will be administered both in Pakistan and the U.S. in ways that will ensure that the project maintains a focus on its objectives while adjusting to changing conditions, assessments and opportunities.

Please ensure sections of your budget are well justified. Value for the investment will be an important consideration in proposal evaluation and selection.

Equipment: Provide a detailed justification for each piece of equipment or service to be purchased for which the expected cost is more than US $2,000. In other words, why is the equipment needed and how many users do you anticipate for the equipment? Also include plans for on-going maintenance of purchased equipment.

Travel: Provide the duration, location, timing, and justification for any project-related trips planned by project participants on either side. Travel costs for U.S. participants may be

included on the U.S. side of the budget only. It is strongly recommended that travel costs for Pakistani participants be included on the Pakistani side of the budget only. The strategy for achieving project objectives could include exchange visits in both directions, but no single formula is prescribed for the duration, sequence, or number of these visits. Although strong budgetary and programmatic emphasis may be given to visits in one direction over another, the benefits of all these visits to the sending as well as the receiving sides should be clearly explained. Exchange visits for the purpose of attending conferences are not allowed except in combination with other grant activities and in support of specific educational objectives at one or more of the participating institutions. Any U.S. funds used for international travel should abide by the Fly America Act http://www.omegatravel.com/government-travel/fly-america-act.asp. Pakistani travelers should adhere to Government of Pakistan travel guidelines.

Construction: As noted above, capital costs for building construction and renovations are not to be included.

Compensation: Remuneration for PIs and co-PIs on the two sides is discouraged; however if necessary U.S. PI and Co-PI salary costs must not exceed 10% of the total U.S. budget and must be thoroughly justified if requested. Remuneration for other researchers, technical personnel, and students working on the project is allowed. For Pakistani PIs, remuneration cannot exceed US $1000 per year and for Pakistani Co=PIs, remuneration cannot exceed US $1000 total (all project years combined).

Administrative/Overhead: In addition, contingency costs are not allowed as line items on either side of the budget. U.S. institutions with a federal Negotiated Indirect Cost Rate Agreement (NICRA) can use this rate when calculating indirect costs. U.S. institutions without a federally-negotiated NICRA may elect to charge a de minimus rate of 10% of modified total direct costs (MTDC). On the Pakistani side, indirect costs are limited to 15 percent if the applicant's university has an Office of Research, Innovation and Commercialization (ORIC) functional as per HEC criteria, or 2 percent if the university has no ORIC. (Indirect costs, also known as overhead expenses, are costs supporting overall operations and management of an institution—for example accounting and auditing fees and general institutional management.) For further details on allowable costs on the Pakistani side of the budget, Pakistani applicants are advised to refer to HEC's standard financial guidelines (Appendix I).

3.k.   Budget forms (four pages max). Provide an itemized budget for the project separately for U.S. and Pakistani partners, using the budget forms provided. Projects may last no more than three years. The total combined budget should not exceed $ 500,000 for a maximum of 3 years. Proposals for multi-year projects must provide separate budgets detailing the resources required for each year of implementation.

Failure to do so will result in the proposal being returned without review.

Co-funding, Fund Leveraging, In Kind Donations, etc.: If applicable: please indicate any other sources of funding for the project. Please discuss if these funds are provided as co-funding, in kind contributions, or as leveraged funds to ensure the funding for this research does not duplicate other efforts.

3.l.   Facilities and Other Resources (two pages max). This information is used to assess the capability of the organizational resources available to implement and/or develop your project. Identify the facilities to be used (Laboratory, Animal, Computer, Office, Clinical and Other). If appropriate, indicate their capacities, pertinent capabilities, relative proximity and extent of availability to the project. Describe only those resources that are directly applicable to the proposed work.

3.m.   Curricula vitae (one to two pages per investigator max). Provide brief CVs (no more than 2 pages each) for all Pakistani and U.S. Principal Investigators, co-Principal Investigators, and project personnel. Please do not include extended CVs, lengthy publications lists, or copies of publications as they will not be forwarded to reviewers. Failure to comply with this may result in your proposal being disqualified from funding considerations.

3.n.   Bibliography and References Cited (as needed). Provide a bibliography of any references cited in the Research Plan. Each reference must include the names of all authors (in the same sequence in which they appear in the publication), the article and journal title, book title, volume number, page numbers, and year of publication. Make sure that only bibliographic citations are included. Be especially careful to follow scholarly practices in providing citations for source materials relied upon when preparing any section of the application.

Funding Criteria

The core values of the peer review process drive this program. It is intended to encourage the highest level of ethical standards in a process that is fair, equitable, timely and free of bias. The first level of review is carried out by scientists and other experts who provide their expertise within the program's focal areas. This first level peer review process is organized independently and in parallel by the Higher Education Commission in Pakistan and by the U. S. National Academy of Sciences along with USAID and DoS according to the following criteria:

A.   RELEVANCE TO PROGRAM OBJECTIVES (25 points max)

The extent to which the proposed project furthers one or more of the following objectives:

1)   Improving the quality, relevance, or capacity of education and research at Pakistani institutions of higher education in science and technical fields;

2)   Increasing the capacity of science and technology to improve the well-being of the Pakistani people, including (but not limited to) such topics as basic education, health, health security, nutrition, water/sanitation, environment, and economic development;

3)   Improving the capacity of Pakistani institutions to support industry competitiveness through public/private partnership and entrepreneurship.

Note: Projects deemed not relevant to any of the program objectives will be ineligible for support and need not be evaluated further.

B.   SCIENTIFIC AND TECHNICAL MERIT (25 points max)

1)   Scientific importance, clarity, and specificity of the proposed project;

2)   Technical feasibility of carrying out project in proposed timeframe and likelihood of achieving objectives;

3)   Compliance with environmental, human subject, animal study, and/or chemical hazards protocols as applicable.

C.   CAPABILITIES OF PARTNER INSTITUTIONS AND INDIVIDUALS (20 points max)

1)   Professional background and achievements to date, including significance of publications;

2)   Demonstrated ability to carry out proposed project based on past activities;

3)   Recognition from peers, professional societies, and other institutions;

4)   Potential for future scientific achievements and/or commercialization.

D.   NATURE OF COLLABORATION (20 points max)

1)   Expected benefits to the Pakistani and U.S. participants and their institutions;

2)   Prospects for long-term collaboration following the completion of the current project;

3)   Appropriateness of match between the expertise and backgrounds of the participants;

4)   Demonstrated commitment of the proposing partners to ensuring the participation of women in the project.

E.   COST EFFECTIVENESS OF PROJECT (10 points max)

Appropriateness of the proposed budget.

F.   COMMERCIAL VIABILITY AND TECHNOLOGY (10 bonus points max)

1)   The type and strength of patent claims;

2)   Significance of market need and opportunity;

3)   Is there a clear path to a commercially viable product or technology transfer;

4)   Probability of attracting additional funding from other sources (industry, government, investors, etc.).

Strategies to achieve project objectives should be feasible and realistic within the projected budget and timeframe. Proposals should include plans for effective dissemination of project findings to researchers, policymakers and relevant stakeholders (for example: industry, business community, etc.).

Policy on Plagiarized Data

Applicants to the Pakistan - U.S. S&T Cooperation Program are advised that both the U.S. and Pakistan have implemented a zero-tolerance policy regarding the submission of fraudulent or plagiarized data, reports and/or any documents. Any such cases discovered by our staff or brought to their attention by program sponsors, review panelists, U.S. and/or Pakistani partners, or members of the public will be investigated immediately. If the presence of fraudulent or plagiarized materials in a proposal submission is verified, the following actions will be taken:

- The application in question will be removed from consideration for funding.
- Representatives from USAID, U.S. Department of State, Pakistan Higher Education Commission, Pakistan Ministry of Science and Technology, and NAS will be notified immediately

Progress Reports

Quarterly Reports Annual Technical and Financial Reports Final Technical and Financial Reports

All funded investigators are required to submit a variety of reports, which are due at specific times during the life cycle of a grant award. Program managers will inform the investigator teams of specific dates. All reports must be accurate, complete, and submitted on time.

The formal evaluation reports should include an assessment of the current status of each participating research team at the time of funding with specific reference to project objectives.

The final project evaluation should provide observations about the project's influence within the participating institutions as well as their surrounding communities or societies.

Financial Guidelines (Appendix 1)

SR.#	Items	Total Allocation
1.	Equipment	As per requirements of the project
2.	Chemical/Glassware (with full justification and details of quantity required for the project)	As per requirements of the project
3.	Accessories	As per requirements of the project (with full justification)
4.	Journal Publication fee/on line material	As per requirement of the project up to Rs. 50,000/-
5.	Honorarium for PI	Rs. 100000/- each year
6.	Honorarium for Co-PI (if justified) One month initial basic pay of scale once in entire project life on	Rs. 100000/- Final year (once in project's life)
	mentioned rates whether Co-PI is working on BPS or TTS	
7.	Studentships • MS/M.Phil. students • Ph.D. students	@ Rs. 20,000/- per month @ Rs. 25,000/- per month

SR.#	Items	Total Allocation
8.	Local Travel (if required and full justified) (Tentative schedule of visits for all the years of project life along with full justification and rates/calculations as per actual expenditure)	Maximum Rs 0.2 million (02 lac) per year or as per actual expenditure if field work/survey is involved; Moreover, students would be allowed only to reimburse actual expenditure incurred during their field visit, if any.
9.	Secretariat Staff (if required)	Rs. 18,000 per year
10.	Stationary/Contingencies	Rs. 10,000 per year
11.	**Any type of entertainment**	**Not Allowed**
12.	Audit/Accounts	Rs. 20,000 (maximum)
13.	Other specific requirements	Depending upon the nature of the project, if fully justified
14.	**University overhead**	
	If ORIC is fully functional as per HEC criteria	15% of total direct cost to meet office support and utilities etc. of ORIC
	If ORIC is not established	02% of total direct cost to meet research office support and utilities, etc.

19. Technology- Based Economic Development Program Funded by: Commercial Law Development Program (CLDP) USA

Program # HEC/R&D/CLDP/P-019

Approving Authority:

Overview

CLDP is a program of U.S Department of Commerce, Office of the General Counsel that is uniquely tasked with providing technical assistance in the commercial law arena to the Governments and Private Sectors of the transitional countries in support of their economic development goals.

In 2010 an informal collaborative program for the support and promotion of Research, Innovation and Entrepreneurship was started by the Higher Education Commission (HEC) with the active support of the Commercial Law Development Program (CLDP).

The R&D Division, HEC launched this initiative for enhancing the role of universities in technology based economic development. One of the purposes of the program was to work in collaboration with CLDP on effective means to strengthen university and industry partnerships.

Program / Project Objectives

- Awareness of Intellectual property
- Development of expertise of ORIC team to effectively manage and support university IP and research commercialization.

Deliverables from HEC side

- Ensure ORIC involvement
- Arrangement of local events
- Coordination
- Selection of relevant personnel for trainings
- Follow up for progress

Program Start Date

June 2010

Program End Date

NA

US Government Funding Involved: (Amount)

Fully funded by U.S Department of Commerce Office of the General Counsel; Commercial Law Development Program (CLDP)/ USAID Technical assistance program

Implementing partner(s)

HEC and Universities

Selection of Nominee

The ideal candidate is someone currently working in tech transfer and is knowledgeable in all aspects of technology commercialization – from patenting to licensing from a university or government research institution.

20. PAK-UK Researchers Link Program (RLP)

<div align="right">

Program # HEC/R&D/RLP/P-020

Approving Authority:
</div>

Overview

HEC in collaboration with British Council initiated a new "Researchers Links Program" to strengthen existing cooperation between the two organizations in the field of Higher Education and Research. For this purpose, a formal letter of intent was signed between HEC and the British Council on June 5,2o14.

Researcher Links initiative utilizes the common ground of shared research interests to provide a forum for early career researchers from the UK and internationally interact, learn from each other and explore opportunities for building long-lasting research collaborations.   The initiative comprises thematic workshops and travel grants, and will be co-funded by British Council and HEC. Through this program, we will be able to assure maximum potential for Pak-UK benefit and longer term sustainability.

Program Objectives

- To improve the quality of research, with citation rates increasing international co-authorship, and higher productivity levels of internationally mobile researchers

- To continue and connect internationally, and build mutually beneficial partnerships for the future with emerging powers.

- To facilitate research collaborations with UK for growing scientific capacity.

- This initiative will also target acknowledged gaps in funding to encourage outward and inward mobility to enable early career researchers to make initial contacts internationally.

- To provide platform to early career researchers to work with established researchers with international reputation, who will mentor and provide guidance and access to their scholarly networks.

- To ensure that all funded proposals are of a high quality by the stewardship of established researchers and the involvement of UK and partner country national research bodies in the peer review process.

- To engage higher education institutions and encourage the 'people to people' interactions that form the most successful research collaborations.

- To work in partnership with national research funders, and facilitate policy-level discussions where appropriate on how to ensure sustainable future research collaborations.

- To encourage the involvement of social sciences and humanities researchers, and provide space for interdisciplinary interaction, with opportunities to bring together researchers from different fields focused on a common theme.

Proposed Activity Plan and Criteria

Workshops

This is an open call for experienced researchers from the UK and Pakistan to lead a workshop in an area which responds to this potential. Proposals are reviewed by UK and partner organizations, and selected on the basis of quality of the leading researchers, fit to priority areas, and potential for longer term sustainability. The workshop will be organized and delivered through British Council and HEC. Guidelines will be produced for running a workshop, and they will include the following requirements:

- Residential workshop, over 3-4 days.
- Approx. 40 participants. Equal number from the UK and Pakistan
- All research disciplines can be covered, and interdisciplinary themes, and those including social sciences and humanities will be encouraged
- Leading researchers from the UK and Pakistan will be involved as 'workshop leaders' in defining theme, inviting keynotes, and selecting workshop participants
- Equal number of participants from the UK and Pakistan – majority being early-stage researchers (postdoctoral level), but also with more experienced researchers to act as mentors
- There will be an open call for participants to the workshops, with clear selection criteria and process

Travel Grants

There will be an open call for travel grants for mobility between the UK and Pakistan. The details of this will be refined during the project development, but key points are:

- Open to all researchers, in UK and Pakistan including those who have participated in thematic workshops
- Support short research visits (up to 3 months) with the aim of starting up a longer term collaboration
- Either inward or outward mobility, or combination of both
- One call per year

Activity Roadmap

- British Council announced the Call for proposal for workshop
- Scrutiny of Received Proposals
- Evaluation of shortlisted proposals
- Meeting with HEC for finalization of Approved workshop proposal
- Issuance of Award Letter
- Release of Funds
- Activity Completion Report

Budget

As per agreement British Council and HEC will contribute £100,000 each. Total sum of contribution will be £600,000 over three years.

21. PAK-UK Knowledge Economy Partnership Program (KEP)

Overview

The Pakistan Higher Education Commission (HEC) 's medium-term development framework 2016-20 explicitly puts ideals of knowledge economy at the center of HE development for this 5 year period: to unlock and exchange the knowledge and expertise held by the universities for the benefit of communities and economies.

Through this program, the British Council and HEC have been working together in supporting Pakistani universities to develop institutional strategies for knowledge exchange (DISKE) in conjunction with their UK HEI Partners' Knowledge Exchange teams. For this purpose, various trainings are organized by the British Council on regular basis for ORIC staff and Knowledge Exchange leads, academics and Vice Chancellors. The program also allows extension of existing international research collaborations with Knowledge Exchange activities and initiation of talks to create sector specific university-industry groups that will guide strategy and activity.

The partnerships are open to public and private sector universities recognized as approved higher education institutions by their government. UK Higher Education Institutions or HEC recognized Higher Education Institutions & Technical and Vocational Institutions and Colleges based in Pakistan and UK

Guidance Notes

Proposals will be considered for partnership project with clearly defined objectives and outcomes. Proposals should also demonstrate how the partnership will be further developed and sustained following the initial exploratory visit. Preference will be given to those applicants seeking to establish partnerships in priority subject areas.

Possible Partners

This grant can be used by the applicant to develop partnerships of their universities with business, public sector (government, departments, regional agencies) or the third sector (third sector includes charities, not-for-profit organizations, development agencies, communities and others). All proposals will be expected to have identified how their collaboration will develop partnerships outside the university sector.

Eligibility

Applicants must be based within a Higher Education Institution in Pakistan or in the UK and have backing by their Head of the Institution. Technical and Vocational Institutions and Colleges based in Pakistan and UK are eligible to apply.

Duration and value of award

For Pakistan – UK Partnerships, funding will be for a maximum of three years. Partnerships should submit 3-year proposals. If the project is successful, 12 months funding will be released in the first

instance. Progress of the partnership will be reviewed after one year against plans and criteria; further funding for subsequent years will be awarded on this basis.

The minimum annual award for a bilateral institution-to-institution partnership is £10,000 per annum; the maximum award is £15,000 per annum. It may be that the funding awarded is less than is requested

For multilateral partnerships, the maximum award is £20,000.

Application Process

Proposals for funding should be submitted on the standard Application Form available on the British Council website http://www.britishcouncil.pk/programmes/education/higher-education

The evaluation process will comprise assessment by an Evaluation Panel who will draw on the advice of external peer reviewers. The HEC- BC Project Board reserves the right to make all final selections and their decision is final on projects

Evaluation Process

There will be a 4 stage approach to evaluating proposals:

a   Initial Screening: This is designed to eliminate technically ineligible proposals. It will be undertaken by the Evaluation Panel. A prioritized list of projects for further evaluation will be drawn up.

b   External Assessment and Evaluation Panel: All projects on the priority list will go for external peer review. One or two peer reviewers will be contacted to obtain their evaluation of the project.

c   Evaluation Panel: Proposals and Peer Reviews will be assessed by an Evaluation Panel. The Panel membership will be cross-disciplinary and will include members who have a background in research and are experienced in evaluating research and other academic proposals.

d   Project Board Agreement: The ultimate decision for agreeing projects for funding support will be made by the Project Board. The Evaluation Panel will submit to the Project Board a prioritized list of projects for consideration with the comments of the Evaluation Panel. The decision of the Project Board is final.

Monitoring

Each partnership may be monitored over the course of the project by both British Council and HEC or by an external auditor. This may be done through site visits and / or progress reports review.

Reporting

Each partnership is required to submit to the British Council a mid-term report six months after the start of the partnership, an end-of-year report and a final report on completion of the project. These will be both technical and financial; the items to be covered will be specified at the time of finalizing the contract.

Application Procedure

The deadline for submission of proposals was 15 May 2014.

The paragraph numbering below follows the section numbers on the Application Form

1.   Project Title

Please choose a title that uniquely describes your project and clearly identifies the primary subject area for the activity.

2. Key Subject Words

Please provide up to 6 key words that most closely relate to the application area.

3. Project Objectives

Please summarize the main objectives of the proposed project in terms that might be understood by a non-specialist. Please provide in a maximum of 100 words.

4. Where did you hear of opportunities for partnerships funding?

Please let us know where you heard of the opportunities

5. Proposed Start and End Dates for your project

The project will commence once the contract has been signed and will run for no more than 36 months. The project must commence no later than April 2017.

6. Information about applicants

The details of the Project Team Leaders in each institution and their contact details should be provided both for UK and the Pakistan University and Non University Partner institutions.

7. Is this a New Link?

Please let us know whether this will be a new link between the institutions. If it is not, please state what other activities you are jointly involved in.

If this is a new partnership please indicate why the partners are best suited to participate and what each institution will bring to the project. Each will be bringing particular knowledge, skills and experience and add a different perspective and dimension to the work.

Partnerships need to provide full details of any previous initiatives and clearly illustrate how their proposal differs and either builds on or complements previous projects.

Partnerships currently receiving any other grant for supporting the same partnership must demonstrate additionally with the British Council funds. e.g Delphe.

8. Overview of the Project

Please provide an overview of the proposed project in a language suitable for a general audience. Include the project objectives, proposed process and anticipated outputs and impact.

9. Proposed Goals / Objective:

Please clearly identify the output in the form of a product or process, need or relationship to non university partner (List of non-University partnerships could be found in the guidelines and also identify other end-users of your output/product.

10. Project Development Plan / Work plan for the Project

Please provide an overview of your work plan to include activities taking place in both UK and the Pakistan Partner HEI. Please note that this work plan will form the basis of your contract and progress will be measured against working towards delivery of the work plan.

11. Proposed Project Outputs:

Please summarize briefly the intended outputs of the proposed co-operation – both qualitative and quantitative. Please try to fill all columns.

12. **Proposed Impact:**

Developing the long-term strategic partnership and how this may contribute to internationalizing the university through multidimensional links. Please also specify the relevance, impact and importance of these impacts. What is the wider longer term goal? How might the project / partnership become self-sustaining once funding has expired?

13. **Exchanges**

Please clearly list the exchanges planned. You must clearly show how many individuals of what level will move in which direction and for how long.

14. **Professional and Academic Experience of Project Groups**

Please tell us more about who the key members of the project teams will be and who will be responsible for what in terms of roles – who will be managing the finances, organizing visits, monitoring and evaluating progress, reporting back to British Council and so forth. Please bear in mind capacity and the time which staff realistically have available.

Please provide evidence of the professional ability and competencies of the teams and select individual members to demonstrate that they can deliver the proposed project.

You are asked to consider how the project team will be structured, how communication and reporting will be coordinated and who will be responsible for different elements of the project. Partner institutions should ensure that there is transparency and all partners have a platform to share ideas, decision making and project related information.

If your application is based around a collaborative research project, a list detailing recent main publications (up to 5) of the groups and principal workers should be included (possibly as a separate attachment). Copies of short CVs (maximum two sides) for the project leaders can also be included.

15. **Financial Proposal**

Please summarize the estimated costs (£ sterling) over the 3 year period of the project and present this information in a spreadsheet.

You are also required to complete the shorter table in the application setting out your requests for funding. Please refer to the section in the Guidelines that set out what activities can be funded and what are ineligible. Note that funds cannot be employed to contribute towards the costs of staff time associated (i-e Full Economic Costs - FECs) nor for administration, estate costs or other institutional overheads.

Air fares should normally be the most reasonable economy class fare.

16. **Other sources of funding**

In this section please include details of any funding which will be received by the project which is from a source outside of the participating institutions. Include details on the exact nature & amount of this funding, the donor organization and the anticipated time frame.

17.   Data Protection Statement

All information on the application forms of proposals that are successful and funded by British Council will have details made public and it is a condition of application to the scheme that you agree to this.

Please confirm that you agree to the use of the data in the application in this way.

18.   Signatures, Submission and Deadline

Please follow the advice set out in these guidelines carefully. Applications should be submitted on the application forms available at

http://www.britishcouncil.pk/programmes/education/higher-education

If necessary signed letters of support from institutional heads or equivalent can be submitted separately.

Appendix 1

A.   What is knowledge exchange?

Knowledge exchange refers to the role that universities can play in stimulating and contributing to innovation and social and economic growth. This role is in addition to core missions of teaching and research, complimenting and enhancing these.

> 'Within a modern, knowledge driven economy, knowledge exchange is about transferring good ideas, research results and skills between universities, other research organizations, business and the wider community to enable innovative new products and services to be developed'

Knowledge exchange is not simply about commercialization of science through creation of spin offs, licenses etc. It is much broader than this, involving academics from all disciplines, functioning through a wide range of exchange mechanisms. Universities' knowledge exchange partners are likely to come from business, public sector and the third sector as well as traditional industries. The benefits are both hard and soft (better skilled academics and graduates, safer communities, better managed organizations).

The UK's Higher Education Innovation Fund (HEIF) categorizes knowledge exchange activities into the following groups:

- Facilitating knowledge / research exploitation and process
- Skills and human capital development
- Knowledge sharing / diffusion
- Supporting the community / public engagement
- Enterprise education and entrepreneurship
- Exploiting the university's physical assets

Some examples of knowledge exchange:

a.   Knowledge / research exploitation and process

- Licensed research

- Patenting (including advice on IP and patenting)

- Spin out company

- University formed / run consultancy

- Research consortia

- Collaborative research / research awards

- Contract research

- Business development e.g. Corporate Social Responsibility (CSR) support; Value Addition (of services or to products)

- App of research in existing external partner (often tech – product based)

- Knowledge Transfer Partnerships (KTPs)

- Sitting on advisory boards

And activities that facilitate this including:

- Contracts / legal support

- Corporate relations building

- Press / communication activities relating to KEX.

- Provision of investment or seed funds

- Providing advice on IP / patent

- External fund raising for research

b.   Skills and human capital development

- Continuous Professional Development (CPD) and short courses

- Business people guest-lecturing and / or co-developing curricula

- Life long learning: secondments, internships (virtual / real) etc

- Careers services

- Work placements (may include KTPs if for services development)

- Project experience

c.   Knowledge sharing and diffusion

- Alumni networks creating individual connections in business, public or third sector
- Knowledge Transfer Networks (KTNs: real / virtual)
- Staff exchanges

- Academic-external organization networks

d. Supporting the community / public engagement

- Outreach work

- Volunteering

- Awareness-raising e.g. through public events such as open lectures; performance arts; exhibitions; school visits etc.

- Regeneration and development programs

- Community strengthening

- Involving the public in research

e. Social enterprise / entrepreneurship

- Enterprise clubs (student / faculty)

- Enterprise educator training

- Graduate start-ups: social or private enterprise

- Enterprise training

f. Exploiting the university's physical assets

- Lab rental, resource sharing
- Technology/ Science parks
- Incubators
- Facilities or equipment leasing

Some types of knowledge exchange impact one partner more than the other

B. Benefits of knowledge exchange

For your HEI

- Improved research relevance, access to funding, access to partners
- New research / collaborative projects
- New contacts (in other sectors, with other HEIs etc.)
- Enhance reputation and regard
- Higher rankings
- More robust management and contracting practices

For your people

- More relevant and improved teaching materials and approaches
- New / improved curricula / courses
- New contacts
- Improved career prospects

- Improved personal reputation with a wider audience of peers
- New insights
- New skills and experiences

Program	Projects Awarded
HEC - BC Knowledge Economy Partnership Program	**14**

22. Pak-Turk Researchers' Mobility Grant Program (PT-MGP)

Program # HEC/R&D/PT-MGP/P-022

Application Form # HEC/R&D/PT-MGP/ F-022

Approving Authority:

Overview

Pak-Turk Researchers' Mobility Grant Program provides opportunities to Pakistani and Turk researchers to interact for joint research activities.

Program Objective

The main objective of this program is to develop new scientific and technological cooperation between Pakistan and Turk higher education institutions by supporting the mobility of researchers from both sides.

Eligibility Criteria

- Applicant must hold a regular faculty position at public/HEC approved private university eligible for research funding
- The major cost of the project will be borne by the participating universities from Pakistan and Turkey.
- The program will support only mobility of the researchers to and from Pakistan.
- Active participation and mobility of young researchers, especially doctoral students (enrolled under supervision by the PI) is one of the key objectives.
- Each project must be submitted simultaneously in Pakistan and Turkey.
- The proposals must be signed by the Head of Institutions as well.
- Partner universities are required to sign Mevlana Exchange Program Protocol for Turkish side
- The host institution must guarantee having the needed capacities (e.g. working space) to accommodate the visiting fellows.
- Maximum two research projects can be submitted by one PI for funding.
- Project life will be for one to three years.

Funding Criteria

The funds will be granted on an annual basis, for maximum three consecutive years (till the life of project).

The HEC Pakistan covers;

- Travel expenses of Pakistani Researchers to Turkey @ Rs. 100,000/- round trip including inland travel:
- Living allowance to Pakistani Researchers in Turkey @ Rs. 3000/- per diem

Contribution by the Turkey covers;

- Travel and Living expenses of Turk Researchers to Pakistan

Submission (How to apply)

- Projects will be submitted on prescribed application form
- Partners will have to submit the project simultaneously in Pakistan and Turkey.

- CVs of Turk and Pakistani researchers participating in the project should be attached to the application form.
- Completed application (4 sets/copies) should be submitted.

Focal Points for Linkages

- In Turk universities: Director of International Relations in the concerned university.
- In Pakistani universities: Director (ORIC), while for non ORIC HEIs, Director Board of Advanced Studies & Research of the university.

Evaluation

The projects are evaluated based on the following criteria:

- Relevance to the priority areas
- Scientific quality of the proposed research
- Research track and experience of the visiting fellow
- Suitability of the Principal Investigator and the host institute
- Complementarity of co-applicants (benefit for each co-applicant)
- Potential for long-term collaboration
- Impact on economy & society

Selection

- Applications will be assessed and ranked according to their scientific quality.
- Active participation and mobility of young researchers, especially doctoral students is one of the primary criteria for selection.
- The proposals will be reviewed by the experts.
- A joint-committee will examine and accord approval for final selection of projects.

Monitoring

- The renewal of the annual funding is subject to the submission of a scientific and financial progress report at the end of each year.
- **A joint mid-term report** must be submitted.
- **A joint final report** is required no later than three months after the completion of projects.
- All progress reports will be reviewed by the experts.

R&D Programs and Support Initiatives
Policy Handbook

FORMS/DOWNLOADS

RESEARCH AND DEVELOPMENT DIVISION
Higher Education Commission
Islamabad

HIGHER EDUCATION COMMISSION
H-9, ISLAMABAD (PAKISTAN)

Application Form
National Research Program for Universities (NRPU)

Title of Proposed Project:---

Subject (e.g. Chemistry):	
Major field (e.g. Organic Chemistry):	
Minor Field (e.g. drug etc.):	
Total Funds Requested (Rs in million):	
Proposed Duration of Project (in months) :	
Proposed Starting Date of Project:	
Turnitin Similarity index (%):	
Name of Principal Investigator (PI):	
Province of the University:	
University Name:	
Designation (BPS or TTS):	
Department:	
University Campus/sub Campus:	
CNIC Number:	
Email address:	
Cell and Phone # :	
Impact factor:	
NRPU projects submitted earlier with ID No.	
a. Completed	
b. Ongoing	
c. Under review process	
Mention beneficiary industry:	
(Letter of support for industry problem to be attached)	

COVER SHEET FOR PROPOSAL

A. **Title of Proposed Project**	
B. **Nature of Proposed Research** B1. Basic ☐ B2. Applied ☐ B3. Community ☐ B4. Commercializable ☐ B5. Thematic ☐	
C. **Domain of Proposed Research** C1. Sciences ☐ C2. Engineering & Technology ☐ C3. Social Sciences ☐ C3. Humanities ☐	
D. **Field of Proposed Research and Specialization** [For example; (**Subject**: Chemistry; **Major Field**: Medicinal Chemistry; **Minor Field/Specialization**: Herb); (**Subject**: Economics; **Major Field**: Micro-economics; **Minor Field/Specialization**: Development Economics) (**Subject**: Physics; **Major Field**: Energy; **Minor Field/Specialization**: Solar)]	
D1. **Subject** :	
D2. **Major Field** :	

D3. **Minor Field (Specialization)** :	

E. Project Digest (Describe the proposed research geared to the non-specialist reader)

E1. Quantifiable measure of impact on society after project completion.

E2. Proposed Duration of Project: (in months)	E3. Proposed Starting Date	E4. Total Funds Requested (Rs in million)

F. Details of Principal Investigator (PI)

F1. Full Name of PI (First-Middle-Last)	F 2. Highest Degree	F 3. Position/Title (BPS/TTS)
F 4. Department/Section	F 5. University/Institution	F 6. CNIC / Passport No.

F 7. Mailing Information

a. Mailing Address:	b. Email:	c. Telephone: (Area code, number and extension) Office : Mobile: Res:

G. Details of Co-PI

G1. Full Name of Co-PI (First-Middle-Last)	G2. Highest Degree	G3. Position/Title (BPS/TTS)
G4. Department/Section	G5. University/Institution	G6. CNIC / Passport No.

G7. Mailing Information

a. Mailing Address:	b. Email:	c. Telephone: (Area code, number and extension) Office : Mobile: Res:

H. Declaration/Certificate:

It is hereby certified that:

a) PI is a full time regular faculty member (BPS or TTS) or is hired on contact not less than project life.
b) Equipment(s) demanded for the subject project is / are not available in the University / Institute.
c) No portion of this project has been submitted and /or funded by HEC or any other funding agency.
d) Subject project is genuinely novel and that there is no plagiarized material including self-plagiarism.
e) PI has never been blacklisted by HEC.
f) Host University/DAI will provide complete support for the establishment & operation of this project, if funded by HEC, and also provide other facilities including land, building, space, laboratories, machinery, equipment, transport, amenities including utilities and other services throughout the life cycle of this project.

Signature of Principal Investigator
                              Signature with Stamp of Director
                                        ORIC/Research/Registrar

Signature with Stamp of the Head of Institution
(Vice-chancellor/Rector of University/
Director of Degree Awarding Institution)

Project Details

1. **PROJECT SUMMARY** (DESCRIBE THE PROPOSED RESEARCH)

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2. **PROPOSED GOALS/OBJECTIVES** (PLEASE IDENTIFY QUANTIFIABLE GOALS)

- If the proposed research is basic, please identify or postulate scientific hypothesis on which your proposed goal is based.
- If the proposed research is applied, please identify the output in the form of a product or process, need or relationship to industry and also identify the end-user of your output/ product.
- Principal investigator is encouraged to make preliminary inquiries with the proposed end user and attach any certificate/ document in support of the proposed research.

2A. **Hypothesis/Basis of Research** (If research is basic)

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2B. **Goals/Objectives** (Please quantify your objectives. Moreover, describe how proposed research is relevant to national needs)

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│    i.                                                           │
│   ii.                                                           │
│  iii.                                                           │
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2C. Identify end user/ beneficiary industry. (Support letter to be attached)

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3. **INTRODUCTION** (THE INTRODUCTION SHOULD CONSIST OF THREE PARAGRAPHS; THE FIRST PARAGRAPH INDICATING THE SCIENTIFIC HYPOTHESIS/COMMERCIAL BASIS ON WHICH THE PROJECT IS BASED, THE SECOND INTRODUCING THE PRECISE NATURE OF THE PROJECT, WHILE THE FINAL PARAGRAPH HIGHLIGHTING THE PROPOSED OBJECTIVES IN THE LIGHT OF THE FIRST TWO PARAGRAPHS).

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4. **Justification for the research problem** (Not more than two pages**)**

- **In case of basic research**, a comprehensive and up-to-date literature survey clearly highlighting the existing gaps and what new information will be added to the existing pool of knowledge.

- **In case of applied research**, identify the industry in Pakistan which will get benefit from the process/product.

- Justify how the proposed research will contribute to the national economy/social sector.

- The principal Investigator is encouraged to discuss the proposed research with the proposed beneficiary and attach supporting documentation.

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4A. Research plan/ Methodology (Schedule/Phasing)

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4B. REFERENCES

<div style="border:1px solid black; min-height:180px;"></div>

5. **IMPACT IN QUANTIFIABLE TERMS** (IMPACT OF PROPOSED RESEARCH ON TEACHING/TRAINING OF MANPOWER, INSTITUTIONAL CAPACITY BUILDING AND ON LOCAL INDUSTRY; ON ECONOMIC DEVELOPMENT OF NATIONAL, REGIONAL AND COMMUNITY DEVELOPMENT).

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6. **Sustainable Development Goals (SDG's)** (How and which of the SDG's will be addressed in this study? Justify how the proposed research will contribute to achieve SDG's of Pakistan. For details on SDG's, please visit:)

- HTTP://UNDOCS.ORG/A/68/970
- HTTP://WWW.UN.ORG/SUSTAINABLEDEVELOPMENT/SUSTAINABLE-DEVELOPMENT-GOALS
- HTTP://WWW.SLIDESHARE.NET/DEREKSCHWABE/THE-17-PROPOSED-SUSTAINABLE-DEVELOPMENT-GOALS

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7. **Collaborating organizations** (PI's are encouraged to collaborate with partner(s) within Pakistan, preferably from under developed areas. While collaborating with research groups (national / international or local industry):

- Identify complementarity and/or justify the need for collaboration.
- Clearly identify the part/s of research that will be carried out in the participating laboratory.
- Include a letter from collaborating partner/agency expressing willingness to collaborate.

- Mention cost sharing by collaborating institution/s.

8. FACILITIES AND FUNDING

8A. Facilities (Equipment available for the research project in the host university/institution)

i)
ii)
iii)

8B. Facilities (Equipment not available for the research project in the host university/institution)

i) .
ii) .
iii) .

8C. Scientific Personnel

i) Available?
ii) Required? (Engaging research students is encouraged)

8D.   Other funding available for the proposed studies (if any)

9. PRINCIPAL INVESTIGATOR (IN ADDITION TO THE FOLLOWING INFORMATION, ALSO PROVIDE ONE-PAGE SUMMARY OF EACH RESEARCH PROJECT COMPLETED, ON-GOING OR SUBMITTED (TO HEC OR ANY OTHER FUNDING AGENCY) AS PI OR CO-PI.)

Sr. #	Title of Project with identification no.	Initiation date	Completion date	Amount(s) awarded	Funding source(s)
(attach one page summary of each project)					

9A. A BRIEF RESUME OF PI (PERSONAL INFORMATION, EDUCATION AND EXPERIENCE, TITLE OF THESIS (MS/PHD), TEACHING EXPERTISE, PROFESSIONAL MEMBERSHIPS, LIST OF PUBLICATIONS, BOOKS PUBLISHED, RESEARCH SKILLS, OTHER RELEVANT FACTS, REFERENCES, ETC.)

(Please attach CVs of PI and Co-PI)

10. Estimated budget for the proposed research period: Please note that as per NRPU policy:

a) No foreign payment could be made either to any firm for the purchase of any item or to any foreigner Co-PI.
b) International travel is not allowed. However, PI may go abroad if he/she is funding/supported by a collaborating partner.
c) However, travel expenditure as per actual can be claimed under head local travel but maximum up to 0.2 million per year.
d) Food/entertainment expenditure can not be demanded in the budget.
e) The only studentship is allowed (M. Phil./MS/MSc(Hons)/PhD students)
f) No research associate/research assistant/field assistant/field surveyor/ or any supporting staff etc. can be engaged other than studentship in the project.
g) However daily paid labor (DPL) can be demanded for a specific time period and may be hired at university rates if justified under the proposal.
h) Secretariat Staff (if required & justified by PI) is allowed @ Rs=18,000 per year.
i) No coordinator/consultant is allowed to be hired as it is the responsibility of PI/Co-PI.
j) Total amount of the project would never be exceeded 20 million in any case if PI,s impact factor allowed.
k) If permanent equipment/s are already available in the host university/institute or their contribution in the execution of the project is not significant, please cut them down.
l) If year wise quantity and cost of expandable supplies demanded is not justified either these are not required or overestimated? Please cut them down to a reasonable size.

Description	% of time devoted to project	year 1	year 2	year 3	Amount (in million Rs.)
A. Salaries and Honorarium					
PI: (Either on BPS or TTS) One month initial basic pay of scale per year on following rates: Assistant Professor: Rs=59210/- Associate Professor: Rs=69090/- Professor: Rs=76720/-					
Co-PI: (Either on BPS or TTS) One month initial basic pay of scale once in entire project life on following rates: Assistant Professor: Rs=59210/- Associate Professor: Rs=69090/- Professor: Rs=76720/-					
Studentships @					
Rs=25000/- per month for Ph.D.					
Rs=20000/- per month for M.S./M.Phil.					
Subtotal:					

	% of time devoted to project	year 1	year 2	year 3	Amount (in million Rs.)
B. Permanent Equipment (Please attach invoice/quotation and expected delivery date for items costing Rs. 0.1 million or above)					
Subtotal:					

C. **Expendable Supplies** (It is mandatory to give year wise quantity and cost with full justification)					
Subtotal:					

D. **Local Travel** (Purpose of local travel, with justification and detailed calculations of each visit/ tentative schedule of visits for each year on a separate sheet)

- Please note that:
  - m) TA/DA is not allowed under NRPU, however, estimated expenditure as per original may be demanded
  - n) However, travel expenditure as per actual can be claimed under head local travel but maximum up to 0.2 million per year.
  - o) International travel is not allowed. However, PI may go abroad if he/she is funding/supported by a collaborating partner.

Local Travel (Maximum 0.2 million per year or as per actual)					
Subtotal:					

E. **Others** (Literature, documentation, information, online literature search, contingencies, postage, etc.)					
Journal publication fee / Online material (Max Rs=50,000/- or as per actual)					
Stationary/Contingency (Max Rs=10,000/year or as per actual)					
Subtotal:					

F. **Miscellaneous**					
Audit / Accountant Fee (Max. Rs 10,000)					
Subtotal:					
Subtotal (D + E + F):					

G. **Indirect cost** (University overheads)					
15% of total direct cost to meet office support and utilities etc. of ORIC (If ORIC office is fully functional). OR					
02% of total direct cost to meet research office support and utilities, etc. (if ORIC is not established).					
Subtotal:					
Grand Total (A + B + C + D + E + F+ G):					

11. **Justification**

    A. **Salaries & Allowances** (Please provide justification for studentship)

    B. **Permanent Equipment** (Please identify and justify major items costing over 0.1 million)

    C. **Expendable supplies** (Justification and details of cost and quantity required)

    D. **Other Costs.** (Justification for travel cost – not exceeding 2 lac per year)

12. Miscellaneous Information or Questions

Miscellaneous Information or Questions	Yes or No
A. Whether HEC approved supervisors as per HEC rules are available in the institute of PI or not?	
B. How many research students are already registered with PI?	
C. How many research associates/students funded by HEC or any other organization, the PI has?	
D. How many non-funded research scholars are registered with PI?	
E. The published research articles:	
i) Number of research articles published as a first author.	
ii) Number of research articles published as a co-author with your own M-Phil/PhD student(s)	
iii) Number of research articles published as a co-author with other researchers.	
F. Research Projects	
i) Number of research projects as PI funded by HEC.	
ii) Number of research projects as PI funded by other agencies.	
iii) Number of research projects as Co-PI funded by HEC	
iv) Number of research projects as Co-PI funded by other agencies.	

13.   Check list/ Have you filled/attached copies of all required documents?

Sr. #	Check list/ required documents	Tick (✔) Yes or No	Reference page No.
1.	Is PI a full time regular faculty member (BPS or TTS) or on contact not less than project life?		
2.	Has PI never been black listed by HEC?		
3.	Is PI not executing any NRPU project whose completion is delayed by three (03) years? (If No, please specify their ID number.)		
4.	Is PI not currently executing or has submitted two or more NRPU projects.		
5.	Is **Turnitin** report of the proposal attached?		
6.	Has a clearance certificate from Institutional Bioethics Committee (IBC) of the university/DAI concerned attached (if required)?		
7.	Have relevant university authorities affixed signatures with date & stamps on the **Declaration Certificates?** (Section **H** of cover sheet for proposal at page # 3)		
8.	Has a brief of the impact of research project been attached? (Section-5)		
9.	Is industry support letter attached? (Section-2C)		
10.	Has a letter of consent from collaborating partner/agency expressing willingness to collaborate been attached? (Section-7)		
11.	Is one page summary of each project of PI already completed/ running/ submitted to any funding agency been attached? (Section-9)		
12.	Is equipment demanded for the execution of the subject project not available with the University / DAI? (Section-10B)		
13.	Have original Invoices / Quotations for permanent equipment costing over Rs.0.1 million or more been attached? (Section-10B)		
14.	Have year-wise cost and quantities of each expendable item been given (Section-10C)?		
15.	Has tentative and detailed schedule of local visits (annual plan) with justification and rates been provided (if study involves field survey/field work)? (Section-10D)		
16.	Has Head of institution duly endorsed the application (Section-14) of the application form?		
17.	Is total cost of the research project in line with the financial provisions of the NRPU program (with reference to PI's Impact Factor)?		
18.	Have you provided project activities on GANTT Chart?		
19.	Have all fields of research proposal been carefully filled and counter checked by the PI?		
20.	Have you prepared 04 sets of research proposal (Hard copies) along with soft/scanned copies **on updated Research Grant Form available on HEC Website** (www.hec.gov.pk/nrpu)		

14. ENDORSEMENT

SIGNATURE OF PI Date	**Signature of the Director ORIC/Research /Registrar (with Stamp)** **Date**
SIGNATURE OF CO-PI Date	**Endorsement of the Head of Institution** **(Vice-chancellor/Rector of University, Director of Degree-awarding Institution**) Signature & Stamp Name & Title: Address: Phone: E-mail Fax: Date:

NATIONAL RESEARCH PROGRAM FOR UNIVERSITIES
INSTRUCTIONS FOR APPLICANTS

Lack of basic equipment, laboratory supplies, scientific literature and financial resources is often a great impediment to the productivity of many creative and talented professors and researchers in institutions of higher learning. In most cases these researchers need modest financial support for research projects to enable them to pursue their research. In the absence of such support, the researchers, particularly faculty members are discouraged and do not indulge in research. Hence, to avoid such situations, HEC has initiated 'National Research Program for Universities' (NRPU) under which creative faculty members of Universities / DAIs are awarded grants to enable them to conduct their research. Research Grants proposals submitted to HEC undergo a procedure of rigorous peer review by top experts in the field as per established international norms.

Purpose and Nature	• Research grants are awarded on competitive merit for high-level and promising scientific research projects to be carried out in Pakistan by university teachers. The purpose of these grants is to promote scientific research in areas relevant to national needs.
Research Domain	• The Research Grants Program provides support for research projects in all disciplines of Science, Engineering and Technology, Social Sciences, and Humanities. •
Duration	• A research grant will normally be provided for a period of one to three years. However, there is no restriction on the lower limit.
Eligibility and Qualification	• The PI has to be a full-time regular faculty member (BPS or TTS) or on contact not less than project life of any public sector university/DAIs or private sector university/DAIs eligible for public funding (list of 29 private sector universities/DAIs is given below). • He/she should have an advance academic degree & relevant experience (PhD or M.Phil/MS) and • Working as academician/researcher but not as administrator.
Approval Procedure	• HEC has designated focal points/Reviewers in all disciplines / sub disciplines. They are the top experts in their fields. All research grants proposals are forwarded to these focal points for evaluation by at least three experts. • Focal points/Reviewers will do initial screening of the projects sent to them by HEC. • In case they do not consider a project suitable for funding, they can reject the project at their level or send it back to HEC for revision by PI, if they so desire. • The comments of focal points and reviewers are considered as the final decision in the case. • Each of the reviewers is paid Rs=8000/- as a token of their valuable contribution to review the research proposal as per HEC policy.

Agreement	• After the Research Grant is approved for funding, a written agreement is signed between the HEC, the grantee (PI) and his/her institute. • The host institute must administer the grant according to the agreement and provide laboratory space, and other facilities necessary for the project. The equipment, material and literature provided for the project through the Research Grants Program remains the in the custody of the institute after the project is completed. • The grantee must keep the HEC properly informed about any applications of the results obtained and acknowledge support from HEC in all publications or presentations. Any research result obtained under the NRPU must be made freely available without restrictions • The Project(s) will be cancelled, if PI is not following the terms & conditions laid down by HEC. •
Annual Report	• PI is required to submit a short annual report along with audited funds utilization report of the project within fifteen days of the completion of each year. Progress report should highlight major achievements during the reporting period and completion of targets/goals as envisaged in the Proposal for the subject year. • The release of the subsequent year award is tied up with the approval of the Annual Progress Report by the experts as satisfactory.
NRPU Policy points	• **As per NRPU policy:** a) No foreign payment could be made neither to any foreign firm for the purchase of any item or to any foreigner Co-PI. b) International travel is not allowed under NRPU. However, PI may go abroad if he/she is funded/supported by a collaborating partner. c) TA/DA is not allowed to any of the PI, Co-PI and student etc, d) However, travel expenditure as per actual may be claimed under head local travel but maximum up to 0.2 million per year per project. e) Any type of food/entertainment expenditure may not be demanded in the budget of NRPU. f) The only studentship is allowed (M. Phil./MS/MSc(Hons)/PhD students) g) No research associate/research assistant/field assistant/field surveyor/ or any supporting staff etc. can be engaged other than studentship in the project. h) However daily paid labor (DPL) can be demanded for a specific time period and may be hired at university rates if justified under the proposal. i) Secretariat Staff (if required & justified by PI) is allowed @ Rs18,000/year. j) No coordinator/consultant is allowed to be hired as it is responsibility of PI/Co-PI. k) Next installment is released after deducting previous unspent amount reflected by PI

in his/her audited expenditure statement submitted to HEC.

a) PI must make all expenditure in accordance with the Government rules/regulations such as PPRA rules.

b) All accounts of these funds shall be maintained as per Government rules and are subject to audit.

c) Project funds are released upon receipt of grant from Govt. of Pakistan.

d) The total amount of the project would never be exceeded 20 million in any case if PI,s impact factor allowed as explained below:

- **Permissible limits of HEC are with reference to the cumulative Impact Factor of the Principal Investigator, given as under:**

For Physics, Chemistry and Biology

Impact Factor	Eligible Amount (Rs. Million)
100 or above	20
50 – 99	17
20 – 49	15
10 – 19	12
0 – 9	10

For Remaining Disciplines

Impact Factor	Eligible Amount (Rs. Million)
50 or above	20
25-49	17
10-24	15
5-9	12
0-4	10

		HEC provides funds as per following details:	
	SR. #	**Items**	**Total Allocation**
Financial Provision	1.	Equipment	As per requirements of the project
	2.	Chemical/Glassware (with full justification and details of quantity required for the project)	As per requirements of the project
	3.	Accessories	As per requirements of the project (with full justification)
	4.	Journal Publication fee/on line material	As per requirement of the project up to Rs. 50,000/-
	5.	Honorarium for PI One month initial basic pay of scale per year on mentioned rates either PI is working on BPS or TTS	Lecturer @ Rs=38350/- Assistant Professor @ Rs=59210/- Associate Professor @ Rs=69090/- Professor @ Rs=76720/- Meritorious Professor @ Rs=82380/-
	6.	Honorarium for Co-PI (if justified) One month initial basic pay of scale once in entire project life on mentioned rates either Co-PI is working on BPS or TTS	Lecturer @ Rs=38350/- Assistant Professor @ Rs=59210/- Associate Professor @ Rs=69090/- Professor @ Rs=76720/- Meritorious Professor @ Rs=82380/-
	7.	Studentships • MS/M.Phil. students • Ph.D. students	@ Rs. 20,000/- per month @ Rs. 25,000/- per month
	8.	**Local Travel:** (if required and full justified) a) International travel is not allowed. However, PI may go abroad if he/she is funding/supported by a collaborating partner. b) TA/DA is not allowed to any of the PI, Co-PI and student etc, c) However, travel expenditure as per actual can be claimed under head local travel but maximum up to 0.2 million per project. d) Moreover, students will be allowed only to reimburse their actual expenditures incurred during their field visit if any.	Maximum 0.2 million (02 lac) per year or as per actual expenditure if field work/survey is involved; (Tentative schedule of visits for all the years of project life along with full justification and rates/calculations as per actual expenditure)
	9.	Secretariat Staff (if required)	Rs. 18,000 per year
	10.	Stationary/Contingencies	Rs. 10,000 per year
	11.	**Any type of entertainment**	**Not Allowed**
	12.	Audit/Accounts	Rs. 20,000 (maximum)
	13.	Other specific requirements	Depending upon the nature of the project if fully justified
	14.	**University overhead**	to meet office support and utilities etc. of ORIC
		If ORIC is notified by HEC	15% of total direct cost
		If ORIC is not notified by HEC	02% of total direct cost

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	Note: - *If a university teacher working as PI or Co-PI in more than one project, he/she may get only one month's Initial Basic Pay under any one of his / her project.*
Procedure to submit the proposal/ How to apply:	• Applications should be submitted on '**Research Grants Form/Application Form NO. HEC/R&D/NRPU/F-001** which may be downloaded from HEC website (www.hec.gov.pk/nrpu). • Four (04) sets of hard copies along with soft copy of duly filled application form must be

	submitted to Office of Research, Innovation and Commercialization (ORIC) / Research Office/Office of the Registrar in the respective university of the PI.
	• The ORIC/Research Office/Registrar Office of the respective university will scrutinize the application to ensure the provision of relevant documents in line with the checklist before forwarding the proposals to HEC.
	• Ethical recommendations, if required, may be provided in the form of letter of clearance obtained from relevant Institutional Ethical Review Committee.

Domain of Proposed Research:	
1.Arts and Humanities	a) history (ancient, medieval and modern); b) classics; c) archaeology; d) modern languages and linguistics; e) English language and literature; f) the visual arts and media; g) librarianship, information and museum studies; h) philosophy, law, religious studies; i) music and creative and performing arts
2.Economic & Social Research	a) sociology; b) economics; c) anthropology; d) political science; e) area or regionally based research and geography; f) international relations; g) cultural and media studies; h) law and linguistics; i) Psychology
3. Engineering & Physical Sciences	a) mathematics; b) chemistry; c) physics; d) materials science; e) engineering; f) computer science, high performance computing; g) energy research; h) research into the built environment; i) information and communications technology; j) research into innovative manufacturing

4.Medical sciences	a) use of animals in research; b) antibiotic resistance; c) brain sciences; d) genomics and proteomics; e) health of the public; f) intensive care; g) patient safety research; h) Stem cell research.
5.Biotechnology & Biological Sciences	a) Genomics, stem cell biology, and bio-nanotechnology, that provide a basis for new technologies in healthcare, food safety, plant and livestock breeding, and bio-processing; b) Whole organism biology relevant to the understanding of diet and health, ageing, animal health and welfare, infectious diseases and immunity, and crop productivity; c) Biological populations and systems that underpin agricultural sustainability, biodiversity and novel bio-based and renewable processes for energy and manufacturing.
6.Natural & Environment sciences	a) geo- and earth sciences, hydrology, soil science, atmospheric research and oceanography; b) biological and microbiological research on animal and plant biodiversity, population dynamics and ecology; c) climate change research; d) environmental chemistry and physics; e) satellite based Earth observation; f) polar research; g) Management of land and natural resources.
7.Science and Technology	a) astronomy; b) computational science; c) energy; d) nuclear physics; e) particle physics; f) Space science.

Guidelines	• The PI has to be a full-time regular faculty member (BPS or TTS) or on contact not less than project life.
	
	• Period of execution of the Research project should not be exceeding three (03) years.
	
	• **Any application will not be entertained if :**
	
	  o Incomplete
	
	  o Received on old Application Forms (*New Application Form accessible at www.hec.gov.pk/nrpu*)
	
	  o Not received by R&D Division of HEC on or before the closing date**.**
	
	  o PI is executing any NRPU project whose completion is delayed by three (03) years.
	
	  o PI is currently executing or has submitted two or more NRPU projects simultaneously for consideration.
	
	  o PI has been black listed by HEC.
	
	  o Applications are directly submitted to HEC, bypassing ORIC/Research Office/Office of the Registrar of the respective university.
	
	  o Application forms are not signed/countersigned/endorsed by Head of Institution, Vice Chancellor/Rector of University//Director of DAI
	
	  o CVs of PI or Co-PI are not attached.
	
	  o Quotations of required equipment, worth over Rs. 0.1 Million are not attached.
	
	  o Report generated by **Turnitin** is not attached.
	
	  o A clearance certificate from Institutional Bioethics Committee (IBC) of the university/DAI concerned (if required) is not attached.

Dr. Amjad Hussain
Director (R&D)
Higher Education Commission
Sector H-9, Islamabad
Email: adhussain@hec.gov.pk;

For general correspondence/ queries, please feel free to contact the following:			
For 3rd & final installment/closing of project	**For award letter and 1st installment**	**For 2nd installment**	**For delayed & miscellaneous Projects**
Ms. Farida Anjum **Deputy Director** R&D, HEC, Sector H-9 Islamabad. E-mail: fdanjum@hec.gov.pk Contact No. 051-90401916	**Ms. Afeefa Irshad** **Deputy Director** R&D, HEC, Sector H-9 Islamabad. E-mail: airshad@hec.gov.pk Contact No. 051-90401919	**Abrar Ahmed** **Assistant Director** R&D, HEC, Sector H-9 Islamabad. E-mail: abahmed@hec.gov.pk Contact No. 051-90401909	**Ms. Nosheen Bibi** **Deputy Director** R&D, HEC, Sector H-9 Islamabad. E-mail: nbibi@hec.gov.pk Contact No. 051-90401910

HIGHER EDUCATION COMMISSION
H-9, ISLAMABAD (PAKISTAN)

Contract for Financial Assistance under National Research Program for Universities (NRPU)

Whereas the Higher Education Commission, subsequently referred to as the "Commission" has agreed to grant a financial assistance to (Name of PI & University) ---subsequently referred to as the **'Party'** for the **project entitled** "---

Now it is mutually agreed as follows that:
1. Provisional award letter is acceptable to the Party and that Party will execute project as per term and conditions in letter & spirit.
2. The Party is a full-time regular faculty member (BPS or TTS) of the university/DAI and/or if Party is on contact, contact life of the party is not less than project life and that Party is not an adjunct professor or other.
3. The Party will not conduct any foreign/abroad visits utilizing funds released under the project of NRPU.
4. Party is not executing or submitted for consideration more than two projects simultaneously under NRPU.
5. The Party is not executing any NRPU project that has already been delayed by three (03) years.
6. **The party has incorporated all comments/revisions/amendments in the final proposal as suggested by evaluator(s)/reviewers in letter & spirt.**
7. The Party has already taken clearance from Institutional Ethical Review Committee (if required).
8. The grant received by the Party from the Commission will be exclusively utilized for the project strictly in accordance with the approved plan.
9. Any deviation in the approved plan, i.e. arrangement for supervision/ execution of the project or in the approved technical program shall require the prior approval of the Commission.
10. If Party intend to go abroad, or leave university for any reason, Party should have not only to inform HEC well before of his/her departure, but Party would also have to nominate a substitute for the period of his/her absence with a plan of activities of project and would do needful as well for getting nominee notified as substitute PI by HEC prior to his departure/leaving the university so that necessary project activities in absence of Party may be carried out by the nominee/substitute. Failure to compile with this clause would lead to refund of the whole released amount by the Party.
11. No project would be shifted from one university/DAI to another without provision of NOC of both universities/DAI(s), Party and Co-PI. In case of any conflict, Party has to refund whole released amount to the HEC. Party him/her self is responsible for completion/ settle down of any project under NRPU.
12. Subject project is genuinely novel and that there is no plagiarized material including self-plagiarism.
13. No portion of this project has already been submitted by the Party for funding to any funding agency and/or HEC and/or been funded to Party by any funding agency and/or HEC.
14. Party has never been blacklisted by HEC.

15. Machine (s), equipment(s), apparatus demanded for the subject project is/are not available in the University / Institute.

16. Any discovery made, patent and/or license obtained based on the research carried out with this grant will be in the name of the Commission and any income accruing there from, will be shared by the Commission and the Party according to a formula to be established by the Commission.

17. Any other income accruing there from any of the component of the project would be returned back to HEC before closure of the project and same cannot be used in any of the project activity.

18. In all publications, reports or presentations concerning the project, the support provided by the Commission will be duly acknowledged by the Party.

19. The Party must keep the HEC properly informed about any applications of the results obtained.

20. Host University/DAI will provide complete support for the establishment & operation of this project, and also provide other facilities necessary for the project including land, building, space, laboratories, machinery, equipment, transport, amenities including utilities and other services throughout the life cycle of this project.

21. The financial Assistance will be for a total amount of Rs.   /- (as per award letter) over a period of -------- months (as per award letter).

22. The assistance will be given to the Party in installments as shown below:
    1st Installment Rs.   /- (as per award letter)
    2nd Installment   Rs. __-_____/-(as per award letter)
    3rd Installment   Rs. __-_____/-(as per award letter)

23. The project funds shall be maintained in a separate account to be operated jointly by the Party & Vice Chancellor/Rector/Treasurer/Accounts Officer (in case of Centers) and all payments will be made by observing all codal formalities of university/ Government rules and regulations like PPRA rules etc.

24. All purchases will be made as per prescribed rules and regulations of the Government/University (like PPRA rules) where the project is located.

25. No foreign payments will be made neither to any foreign firm for the purchase of any item/equipment etc. nor to any foreigner (as Co-PI)/consultant etc. Hence Party will not open any LC for foreign payments from NRPU released grant.

26. Travel expenditure as per actual will be reimbursed from the head of local travel.

27. Any type of food/entertainment expenditure will not be reimbursed out of any budget head of NRPU released grant.

28. Principal Investigator will submit his/her annual expenditure statement after paying his/her all due payments of expenditures on the specimen of annual expenditure statements (1st, 2nd, 3rd & final consolidated) that is available on HEC-NRPU web site under download page well in time.

29. Party is agreed that next instalment will be released after deducting previous unspent amount (if any) reflected by PI in his/her annual audited expenditure statement submits to HEC.

30. The expenditure incurred from the grant will also be subject to periodical audit by the Commission and the Party shall produce the books of accounts to the persons(s) appointed for this purpose by the Commission.

31. Machines, equipment, apparatus or any other thing purchased out of the grant given by the Commission will remain the property of the Commission, or with the permission of the Commission, the University where the project is located.

32. Three annual progress reports with expenditure statement (3 copies) duly countersigned by Resident Auditor/Treasurer of the University/DAI etc. will be submitted by the Party to the Commission within fifteen days of the completion of each year in accordance with the instructions issued from time to time by the Commission to the Party.

33. The Commission shall have the right to evaluate the progress of research/ investigation/work done by the party through an evaluation Committee of experts/ reviewers/Independent reviewer/ expert to be appointed by the Commission for this purpose. This evaluation may include on-site inspections also (if required by Commission or expert(s).

34. The release of the subsequent year award/next installment will be tied up with the satisfactory recommendations/approval of the Annual Progress Report by the expert/reviewer/committee of experts/ reviewers as per their advice/recommendations. Party would have to revise his/her annual/final reports if so desired by the Commission/expert(s).

35. Party will submit following document in the end of the final year of the project so that his/her project could be closed on the satisfactory review of this report.
    a) Final Annual Progress Report (Specimen is available under download page).
    b) Project Completion (Codal Formalities Proforma) Proforma (Specimen is available under download page).
    c) Consolidated Expenditure Statement duly Audited by the Resident Auditor of the Respective University (specimen is available under download page).
36. The Project(s) will be cancelled, if Party is not following the terms & conditions laid down by HEC and/or failure to compile with any of the clause of agreement will lead to refund of the whole released amount by the Party to HEC.

In witness hereof, I/we _____ put my/our

signature(s) here below on the _____ day of _____.

Signature of the Party

Signature of the Vice-Chancellor / Institutional Head with Official Stamp

Dated:

Name:
Designation:
Dated:
Signature
Higher Education Commission Dated:

HIGHER EDUCATION COMMISSION
H-9, ISLAMABAD (PAKISTAN)

First Year Funds Utilization Report - NRPU

Report Ref. No. _____   Dated: _____

Name of PI: **Project No.:_____**

University Name/City:

Project title:

PI Joint Bank Account No.:

Name & Branch of Bank:_____

Sr.#	Item	Total Approved Funds as per award letter	1st Installment Released/ funds received	Total Expenses	Balance (If any)	Remarks
i.	Honorarium to PI:					
ii.	Honorarium to Co-PI:					
iii.	Research Assistant					
iv.	Permanent Equipment					
v.	Expendable supplies					
vi.	Literature Information:					
vii.	Local Travel					
viii.	Audit/ Accountant fee					
ix.	Indirect cost					
	Total Rs.					

It is certified that details given in the report are correct as per Audit/Finance/Treasure office record.

Signature/ Stamp of PI_____   **Signature/ Stamp of Internal Auditor_____**

Signature/ Stamp of HOD _____   **Signature/ Stamp of Treasurer _____**

Signature/ Stamp of Director ORIC _____   **Signature/ Stamp of VC/Rector_____**

Note:

1. Balance amount mentioned in the utilization report will be adjusted in the next installment.
2. Over and above cost in any budget head isn't allowed.
3. Re-appropriation of the budget at any stage isn't allowed.
4. Committed amount will be treated as balance amount with the PI.
5. Please attach duly verified Bank Statement of the duration of expenditure statement.
6. Expenditure statement must be forwarded through ORIC office.

HIGHER EDUCATION COMMISSION
H-9, ISLAMABAD (PAKISTAN)

Second Year Funds Utilization Report - NRPU

Report Ref. No. _____   Dated: _____

Name of PI: **Project No.:**_____

University Name/City:

Project title:

PI Joint Bank Account No.:

Name & Branch of Bank:_____

Sr.#	Item	Total Approved Funds as per award letter	1st Installment		2nd Installment		Total Amount Received by PI as 1st, and 2nd Installment	Total Expense by PI from 1st, and 2nd Installment	Balance (If any)	Remarks
			Received	Utilized	Received	Utilized				
		A	B	C	D (F-B)	E	F (B+D)	G (C+E)	H	I
i.	Honorarium to PI:									
ii.	Honorarium to Co-PI:									
iii.	Research Assistant									
iv.	Permanent Equipment									
v.	Expandable supplies									
vi.	Literature Information:									
vii.	Local Travel									
viii.	Audit/ Accountant fee									
ix.	Indirect cost									
	Total Rs.									

It is certified that details given in the report are correct as per Audit/Finance/Treasure office record.

Signature/ Stamp of PI_____   **Signature/ Stamp of Internal Auditor_____**

Signature/ Stamp of HOD _____   **Signature/ Stamp of Treasurer _____**

Signature/ Stamp of Director ORIC _____   **Signature/ Stamp of VC/Rector_____**

Note:
1. Balance amount mentioned in the utilization report will be adjusted in the next installment.
2. Over and above cost in any budget head isn't allowed.
3. Re-appropriation of the budget at any stage isn't allowed.
4. Committed amount will be treated as balance amount with the PI.
5. Please attach duly verified Bank Statement of the duration of expenditure statement.
6. Expenditure statement must be forwarded through ORIC office.

HIGHER EDUCATION COMMISSION
H-9, ISLAMABAD (PAKISTAN)

3rd/Final Year Funds Utilization Report - NRPU

Report Ref. No. _____   Dated: _____

Name of PI: **Project No.:_____**

University Name/City:

Project title:

PI Joint Bank Account No.:

Name & Branch of Bank:_____

Sr.#	Items	Total Approved Funds as per award letter	1st Installment		2nd Installment		3rd Installment		Total Amount Received by PI as 1st, 2nd and 3rd Installment	Total Expense by PI from 1st, 2nd and 3rd Installment	Balance (If any)	Remarks
			Received	Utilized	Received	Utilized	Received	Utilized				
		A	B	C	D	E	F	G	H (B+D+F)	I (C+E+G)	J	K
i.	Honorarium to PI:											
ii.	Honorarium to Co-PI:											
iii.	Research Assistant											
iv.	Permanent Equipment											
v.	Expendable supplies											
vi.	Literature Information											
vii.	Local Travel											
viii.	Audit/ Accountant fee											
ix.	Indirect cost											
	Total Rs.											

It is certified that details given in the report are correct as per Audit/Finance/Treasure office record.

Signature/ Stamp of PI_____   **Signature/ Stamp of Internal Auditor_____**

Signature/ Stamp of HOD _____   **Signature/ Stamp of Treasurer _____**

Signature/ Stamp of Director ORIC _____   **Signature/ Stamp of VC/Rector_____**

Note:

1. Balance amount mentioned in the utilization report will be adjusted in the next installment.
2. Over and above cost in any budget head isn't allowed.
3. Re-appropriation of the budget at any stage isn't allowed.
4. Committed amount will be treated as balance amount with the PI.
5. Please attach duly verified Bank Statement of the duration of expenditure statement.
6. Expenditure statement must be forwarded through ORIC office.

HIGHER EDUCATION COMMISSION
H-9, ISLAMABAD (PAKISTAN)

Codal Formalities Performa for Completed Projects of NRPU

Report Ref. No. _____   Dated: _____

1. Project/PI particulars:

Title of Project …………………………………………………………………………………..

Name of PI: …………………………………………………………………………………………

Project Number; ……………………………………………………………………………………

Total Cost …………………………………………………………………………………………..

Duration …………………………………Start Date ……………………………………………

Completion Date ……………………………………………………………………………………

University / DAI's …………………………………………………………………………………..

E-mail (PI)…………………………………………….. Contact …………………………………

2. Sector of Institution (please tick (√) only one)

☐   Public …………………………☐   Private …………………………………………

3. Objectives of Project……………………………………………………………………………..
………
………..
…….
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…….
………..

4. Summary of Project (use extra sheets if required and please provide soft copy)

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5. Out comes

i. Publication (please attach list of mentioned publication)

Research papers (National)		Research papers (International)		Total
In impact factor journals	In non-impact factor journals	In impact factor journals	In non-impact factor journals	

ii) Research Supervised (Number of students who have **completed** research degrees under said project)

PhD produced	M.S/M.Phil Produced	Total

iii) Patents (Numbers)

Local			Foreign			Total
Submitted	Granted	Income/royalties	Submitted	Granted	Income/royalties	

iv) Major Equipment (Please give detail of equipment purchased under said project along with verified copy of entry page of university stock register)

S.No.	Name of equipment	Cost of equipment	Entry Page in University Stock Register

v) Linkages with R&D organizations, universities and industries

S. No.	Counterpart organization	Type of linkage

(Signature/Stamp of PI)

vi) Other out puts

No. of Products		No. of Process/methods		No. of Crop varieties		Any other out put Please specify	
Developed	Marketed	Developed	Marketed	Developed	Marketed	Developed	Marketed

6. Have you considered communicating any interest in transferring research outcomes/ products to:

      (a) Private companies

      (b) Government organization

      (c) Non-governmental organization

      (d) ORICs

      (e) Others (please specify)

      (f) None of the above

7. Paper presented under the said NRPU project

S No.	Title of conference	Level	
		International	National

8. Benefits of the Project to Community (please mention the target group of the community, if any)

………

………

………

……

(Signature/Stamp of PI)

9. Major problems hindering the execution of project, if any

………

………

………

………

……

Signature/Stamp of PI_____

Signature/Stamp of Director ORIC_____

Signature/Stamp of HOD_____

Signature/Stamp of PI_____

Review Report – NRPU

PROJECT PROPOSAL EVALUATION PROFORMA – NRPU

(To be completed by the Focal Person)

Project Title:

Project No:

Name of Principal Investigator:

Name of University/ Department:

Sr. No.	Mandatory requirements	Yes / No/NA
1.	Is proposal under consideration a pure research project, not meant just for establishment of a laboratory or purchase of equipment or hiring of manpower? (Proposal under review **must not** be a development or establisment project)	
2.	Are the qualifications and expertise of the Principal Investigator/Co-PI relevant to the project? Are CVs of PI and Co-PI attached?	
3.	Has one page summary of each project of PI, already completed, ongoing, and/or submitted to any funding agency including HEC, been attached?	
4.	Have invoices / quotations for permanent equipment costing over Rs.0.1 million been attached?	
5.	Is year-wise justified quantity and cost of expendable supplies (chemicals/reagents, kits, glassware/plastic ware etc.) given?	
6.	Is total cost of the research project in-line with the financial provisions of the NRPU program (with reference to PI's Impact Factor)?	
7.	Are project activities and milestones clarified with respect to timelines on GANTT Chart (either inserted inside the proposal in Section 4A –Schedule/Phasing/Methodology and / or given separately)?	
8.	Does the institution possess necessary infrastructure and is sufficiently equipped for smooth execution / completion of the proposed project?	
9.	Is a clearance certificate from Institutional Bioethics Committee (IBC) of the university/concerned institute (if required) attached?	
10.	Does the proposed project have enough merit to process it through the extensive evaluation system? Is it justified considering rationality, creativity, originality and/or going to solve the critical national problem (for applied project only where industry has participated/contributed)?	
Comments/ Remarks:		

If the answer is "No" to any of the above queries, no further evaluation is necessary. The project is simply not eligible for funding. However, in the case of "Yes", the focal person may process the project further for extensive review involving three expert reviewers, on the basis of the following criteria:

a)	**Focal Person Rejects the Project after Initial Screening.**	☐
	OR	
b)	**Focal Person considers the Project Suitable for Detailed Review after Initial Screening.**	☐
Name & Address of the Focal Person where cheque has to be sent:		

CNIC of the Focal Person	
Bank Account # of the Focal Person (if desired to share)	
Name of the Bank, Bank code, City	
Signature of Focal Person & Date	

Review Report – NRPU

(To be completed by the Expert Reviewer)
Grant Total Weightage Score 100

A. What is the intellectual merit of the proposed activity? (Total Score 60)

A. 1. Principal Investigator   (Total Weightage Score 20)

PI is the key person responsible for implementing the research project and for ensuring its completion within the stipulated duration by achieving all the stated objectives and goals of the research proposal. The success of the research project depends on the intellectual and managerial skills of the PI. Therefore, it is very important to review the CV of PI & Co-PI. HEC encourges to have one Co-PI.

Description	Score obtained (out of 5 each)	Score Obtained (out of 20)
a) Please assess the Principal Investigator/Co-PI in terms of his/her: **I) Qualification, experience & expertise** • Academic qualifications • Professional experience • Expertise with relevance to the proposed research • Industrial applications of research done so far (if applicable)		
(II) Research work & Publications • Research publications with relevance to the proposed research • Research publications in reputed scientific/professional journals • Productivity in terms of number & quality of research publications • Post-graduate students supervision		
b) Does the research team (including PI, Co-PI, experts, and collaborators) possess sufficient expertise to successfully execute the proposed research project?		
c) Is prior research undertaken by PI of good quality, especially related to the proposed area?		

Comments/ Remarks:	

A. 2. Significance (Total Weightage Score 20)		
Description	**Score obtained (out of 4 each)**	**Score Obtained (out of 20)**
a) Is the proposal rationally sound and the research gaps are clearly identified?		
b) To what extent the proposed activity is based on creative and original concepts?		
c) How well does the proposed activity advance the current state of knowledge within its own field or across other relevant fields?		
d) To what extent there is is no duplication or repetitiveness to the existing data (in public domain)?		
e) Is the scientific hypothesis valid and warrants research? And does the proposal address / solve a problem of national importance?		
Comments/ Remarks:		

A. 3. Approach (Total Weightage Score 20)		
Description	**Score obtained (out of 4 each)**	**Score Obtained (out of 20)**
a) How well conceived & realistic are the project goals in terms of their: • Significance? • Do-ability in the proposed timeframe? • Advancement of knowledge?		
b) Are the conceptual framework, design, methods, and analyses well-conceived and developed?		
c) Is the project multi-disciplinary and interdisciplinary expertise available to pursue the objectives? And has previously published work been comprehensively reviewed? Is PI and/or research team's previous related work cited in this proposal?		
d) Is detailed methodology of each research step clearly stated?		
e) Does the proposal: • Include a clear plan of work and scheduling? • Clearly define key performance indicators?		
Comments/ Remarks:		

B. What are the broader impacts of the proposed activity? (Total Score 25)

B. 1. Socio-Economic (Total Weightage Score 10)		
Description	**Score obtained (out of 2 each)**	**Score Obtained (out of 10)**
a) To what extent does the proposed work impact the national economy in terms of decreasing dependence on imports, improving productivity or enhancing exports?		
b) How well the proposed solution / developed product / process is related to the needs of the beneficiary industry?		
c) Will proposed study pass any benefit over to society/ help the social sector?		
d) Does the proposed research contribute to achieving SDG's (sustainable development goals) of Pakistan?		
e) Has the end-user been identified? Would the end-user be willing /consented to take up the research findings to further explore commercial aspects?		

Comments/ Remarks:	

B. 2. Research (Total Weightage Score 05)	Score obtained (out of 2.5 each)	Score Obtained (out of 05)
Description		
a) To what extent will this proposal enhance the infrastructure for research, such as facilities, instrumentation, networks, and partnerships at the host institute?		
b) Will results of the proposed research be disseminated broadly through research reports and publications to enhance scientific and technological knowledge?		
Comments/ Remarks:		

B. 3. Education & Training (Total Weightage Score 05)	Score obtained (out of 1 each)	Score Obtained (out of 5)
Description		
a) To what extent will the proposal enhance the infrastructure for education, such as facilities, instrumentation, networks, and partnerships?		
b) How will the activity help in the advancement of understanding through promoting teaching, training, and learning?		
c) Will it facilitate the development of new courses?		
d) To what extent the proposed funding will contribute to the students (at individual & collective level) who will get direct training and indirect help.		
e) Will proposed research have any impact on teaching/training of manpower, institutional capacity building and on local industry; on the economic development of national, regional and community development?		

Comments/ Remarks:	

B. 4. Collaboration (Total Weightage Score 05)		
PI has to justify the need for collaboration. PI should clearly identify the part/s of research that would be carried out in the participating laboratory. **PI has to include a letter from collaborating partner/agency expressing willingness to collaborate.** PI may mention cost sharing by collaborating institution/s if PI doing a collaboration that may be in terms of monetary or services form. No payments should be made to collaborating partner from the funds released under NRPU for analysis/any other purpose etc within the country or abroad.		
Description	**Score obtained (out of 0.5 each)**	**Score Obtained (out of 05)**
a) How well does the proposed work enhance academia-industry/end user partnerships?		
b) If the research involves collaboration with another institution, how relevant is that to the proposed research goals and plans?		
c) Has PI identified /justified the need for collaboration?		
d) Has PI clearly identified the part/s of research that would be carried out in the participating laboratory?		
e) Is the collaborating partner willing to cooperate actively and promised to use the output (product/process)?		
f) Has PI included a letter from collaborating partner/agency expressing their willingness to collaborate?		
g) Has PI attached any certificate/ document from end-user, in support of the proposed research?		
h) Has PI mentioned cost sharing by collaborating institution(s)/end users? (May be in monetary terms or in the form of services).		
i) Will the problem conceived / developed in collaboration with local industry: - lead to the development of a product/process? - Improve an existing product/process? - provide a substitute for an imported product/process?		
- help reduce imports/ increase export? - remove a technical difficulty or solve a technical problem? - benefit the end-user/ beneficiary industry (major/minor) ?		
Comments/ Remarks:		

C. Institutional Facilities and Infrastructure (Total Score = 10)

Host institution should be sufficiently equipped for smooth execution of the project under review. Host university/institution should possess the necessary infrastructure to undertake and complete the proposed project. PI should have sufficient support/facilitation from the host university/institution for smooth execution of the project under review. Therefore, it is very important for a reviewer to see the list of equipment already available for PI in the host university/institute for the research project **to assess demand for permanent equipment** not available in the host institution necessary for the smooth execution of the research project under review.		
Description	**Score obtained (out of 2 each)**	**Score Obtained (out of 10)**
a) Do the researchers (individual or team) have adequate facilities and resources to perform the proposed work in terms of: Equipment available for research at the host university/institution		

	(is laboratory well equipped)? • Laboratory facilities and supplies required for smooth execution of research activities?		
b)	Is demand for permanent equipment under budget head reasonable and justified in term of its utilization in the project under review?		
c)	How much significant is the demanded equipment (having worth more than Rs 0.5 million) in terms of contribution in successful completion of the project under review?		
d)	To what extent will the institution increase its capability to perform a follow-up or similar research on national or regional problems?		
e)	Is year wise quantity and cost of expendable supplies demanded justified? Otherwise focal person/reviewer must cut it down to a reasonable amount.		
Comments/ Remarks:			

D. Budget estimates:

- If permanent equipment is already available in the host university/institute or their contribution in the execution of the project is not significant, please cut them down.
- If year wise quantity and cost of expendable supplies demanded is not justified, either these are not required or overestimated? Please cut them down to a reasonable size.
- **As per NRPU policy:**
  - p) HEC encourages to have one Co-PI.
  - q) Food/entertainment expenditure can not be demanded in the budget.
  - r) No foreign payment could be made either to any firm for the purchase of any item or to any foreigner Co-PI.
  - s) International travel is not allowed. However, PI may go abroad if he/she is funding/supported by a collaborating partner.
  - t) Travel expenditure as per actual can be claimed under head local travel but maximum up to Rs 0.2 million per project.
  - u) Studentship is allowed only for M. Phil./MS/MSc(Hons)/PhD students
  - v) No research associate/research assistant/field assistant/field surveyor/ or any supporting staff etc. can be engaged **other than studentship** in the project. However daily paid labor (DPL) can be demanded for a specific time period and may be hired at university rates if justified under the proposal.
  - w) Secretariat Staff (if required & justified by PI) is allowed @ Rs=18,000 per year.
  - x) No coordinator/consultant is allowed to be hired as it is the responsibility of PI/Co-PI.
  - y) The total project cost is not to exceed Rs 20 million in any case if allowed under PI,s impact factor.

Cost Estimates	Proposed	Recommended	Reasons for Amendments (if any)
Honoraria for PI (one-month initial basic pay of scale per year)			
Honoraria for PI (one-month initial basic pay of scale per year once in entire project life)			
Studentships @			
Rs. 25,000/- per month for Ph.D. students			
Rs. 20,000/- per month for M.S./M.Phil. students			
Permanent Equipment (Invoice/quotation for items costing Rs. 0.1 million or above must be attached by PI)			
Expendable supplies (Year wise quantity and cost with full justification must be given by PI)			
Local travel (International travel is not allowed, maximum Rs 0.2 million if justified) (In case of social sciences Special permission may be granted by HEC (authority) to those proposals where extensive survey, samples collection and traveling are involved)			
Journal publication fee / Online material (Literature, documentation etc.) (Max Rs=50,000/- or as per actual)			
Stationary/Contingencies (Max Rs=10,000/year or as per actual)			
Miscellaneous			
Audit / Accountant Fee (Max. Rs 10,000 per year)			
Other			
Indirect cost (University overheads)			
15% of the total direct cost to meet office support and utilities etc. of ORIC (If ORIC office is fully functional). OR			
02% of the total direct cost to meet research office support and utilities, etc. (if ORIC is not established).			
Total:			

D. 1. Budget reasonability and justification (Total weightage score 05)		
Description	**Score obtained (out of 01 each)**	**Score Obtained (out of 05)**
a. Is the proposed budget adequate (neither over- nor underestimated) to accomplish the stated aims?		
b. Is the choice of equipment appropriate? Are the costs / time frames reasonable?		
c. Has the PI justified the demand for : • Equipment?		
• Expendable supplies?		
d. Reasonability of request in various categories vis-à-vis justification provided – Is it convincing?		

Comments/ Remarks:

Total Score = (A+B+C+D) = ☐

Summary of Comments of Reviewer:
(Reviewer is requested to please tick any one option mentioned below)

RECOMMENDATIONS:

a. **Accept in current form** ☐

b. **Reject** ☐

Reviewer Information:

Name of the Focal Person	
University / Institute of Focal person	
Name & Address of the Reviewer along with Designation, Department, and University/Institution	
Reviewer Office Phone	
Mobile	
CNIC of the Reviewer	
Email of the Reviewer	
Bank Account # of the Reviewer (if desired to share)	
Name of the Bank, Bank code, City	
Reviewer Signature & Date	

Review Report – NRPU

GUIDELINES FOR PEER REVIEWING
REVIEW REPORT (ROUND-I)

Reviewers are requested to write detailed comments against each item and sub-item listed below. In case the item is not relevant to the particular proposal being reviewed an N/A may be indicated.

What is the intellectual merit of the proposed activity?
Important consideration categories:

Significance
How important is the proposed activity to advancing knowledge and understanding within its own field or across different fields? If the aims of the application are achieved, how will the current state of knowledge be advanced? To what extent does the proposed activity suggest and explore creative and original concepts?

Approach
Are the conceptual framework, design, methods, and analyses well-conceived and developed?
How well organized is the proposed activity? Do the researchers (individual or team) have suitable facilities and appropriate resources to perform the proposed work? Is the proposed budget adequate (neither over- nor underestimated) to accomplish the stated aims?

Investigator
How well qualified is the proposer (individual or team) to conduct the project? (If appropriate, please comment on the quality of prior work.

What are the broader impacts of the proposed activity?
Important considerations:

Research
To what extent will it enhance the infrastructure for research, such as facilities, instrumentation, networks, and partnerships? Will the results be disseminated broadly to enhance scientific and technological understanding?

Education & Training
How well does the activity help in the advancement of understanding while promoting teaching, training, and learning? To what extent will it enhance the infrastructure for education, such as facilities, instrumentation, networks, and partnerships?

Economy (In case of Applied Projects)
How well does the proposed work enhance academia - industry partnerships? To what degree does the proposed work directly impact the economy by decreasing dependence on imports, improving productivity or enhancing exports?

General
What may be the benefits of the proposed activity to society?

Summary of Comments of Reviewer: (Reviewer is requested to please tick any one option mentioned below, it is mandatory to tick)
RECOMMENDATIONS:

   a. **Accept in current form**

   b. **Reject**

HIGHER EDUCATION COMMISSION

H-9, ISLAMABAD (PAKISTAN)

Review of Annual / Final Progress Report
(To be completed by the Reviewer)

1.   **Project No.**

2.   **Project Title:** ....

3.   **Name of Principal Investigator** ....

4.   **Name of University/*Department*:** ....

5.   **Name of Reviewer with CNIC#:**.. ..

6   **Mobile No. of Reviewer:**

………………………………………………………………………………………………

7.   **Critical Evaluation of the work done, both qualitative and quantitative , and deficiencies if any, with particular reference to:**
> I.*Goals/Objectives*
> II.*Research Plan*
> III.*Reliability of Data collected and analyzed:*
> IV.*Interpretation of results and conclusions:*
> V.*Budget utilization*
> VI.*Quality of Research done and presented so far*

8.   **Recommendations:**

A. **Progress Satisfactory** and next installment recommended (give a brief   justification):

B. **Progress partially satisfactory** and next installment recommended but with following improvements:

C. **Progress unsatisfactory** and following improvements to be made before release of next installment:

Signature with date: …………………………………………………………………

Name & Designation : …………………………………………………………………

NRPU – FREQUENTLY ASKED QUESTIONS

Question: Should soft copy of each proposal be in different CDs/flashes or all proposals should be burnt on one CD or flash, along with Excel Sheet?

Reply: All proposals should be burnt on one flash, along with Excel Sheet.

Question: Our faculty and researchers are facing problem to complete their profile on eportal. Therefore you are requested to kindly look into this matter and accept only hard copies of the projects this time.

Reply: Online submission is mandatory, if any PI fails to submit his/her proposal online and he/she does not follow instructions conveyed on HEC (NRPU) web site, his/her proposal would not be processed and will automatically be considered as rejected at initial stage without going through the review process.

Question: I have evaluated NRPU project proposals, and have been paid Rs.92000/- as remuneration, I have to submit the Income tax return for year 2015-16, therefore I need income statement and proof of Tax deduction, if any.

Reply: No tax deduction was made from your payment. Please pay income tax as per government rules. You have all record of payments as you get your payment via cheque.

Question: Sometimes, it is difficult to get along with co-investigator owing to lack of compatibility and cooperation. Can I independently submit my research project?

Reply: Yes

Question: Some faculty members have a concern that last year all projects submitted from their university were not evaluated. Upon query to HEC officials it was told that ORIC office has not been established nor approved by HEC, for that reason projects are not considered.

As per our information still the same condition prevails, ORIC is not approved by HEC till now. In such circumstances, we have a question if we submit a project this time again would it be evaluated this time or same episode will happen as of last year.

Reply: HEC never rejected a project proposal of any university due to the reason that their ORIC was not established. Proposals were not considered for evaluation because the concerned universities did not follow HEC (NRPU) guidelines. If ORIC is not established, university may send their proposals as per HEC guidelines through their respective research offices or registrar offices.

Question: Can a visiting faculty member of a University participate as CO-PI?

Reply: NO

Question: what is the language for proposal submission as my subject is Urdu so can I write down my proposal in Urdu or it must be in English?

Reply: You may write your proposal in Urdu or English

Question: I am assistant professor at University of Education Faisalabad. At present there is no MPhil or PhD program at our campus and I want to apply for NRPU. Kindly guide me if I am eligible to apply since I will not be able to nominate any MS / PhD student for the project.

Reply: HEC has no problem/issue/reservation if you do not involve any student for any reason. You may apply but you yourself have to do all project activities as per approved plan as there is no provision/option of any helping hand in the program other than studentship.

Question: Can Co-PI be from a foreign university?

Reply: No foreign payment could be made either to any foreign firm for the purchase of any item/equipment etc. or to any foreigner (as Co-PI)/consultant etc. However, you may opt a Co-Pi from a foreign university.

Question: Can one add a Co-PI and an additional collaborator (2 different persons)?

Reply: No research associate/research assistant/field assistant/field surveyor/ or any supporting staff/collaborator on payment etc. can be engaged other than studentship in the project. However if any person is willing to extend his/her support as collaborator, he may do so but without any financial responsibilities on part of HEC.

Question: Is the submission of 2 projects simultaneously in NRPU allowed?

Reply: Principal Investigator can execute or submit only two research projects simultaneously under any of HEC funded research grant programs either under NRPU or UITSP or TDF or TRGP or Pak-US etc. (either ongoing, submitted, under review, etc).

Question: Do we need to submit 3 quotations with equipment or one is enough?

Repy: At time of proposal submission, one quotation is enough. However, if your project is approved, you have to follow PPRA rules/university rules etc. where 3 quotations are required (for details go through PPRA rules).

Question: Can a collaborator be from a foreign university?

Reply: No foreign payment could be made either to any foreign firm for the purchase of any item/equipment etc. or to any foreigner (as Co-PI)/consultant/ collaborator etc. However, you may opt a Co-PI/ collaborator from a foreign university.

No research associate/research assistant/field assistant/field surveyor/ or any supporting staff/collaborator on payment etc. can be engaged other than studentship in the project. However if any person is willing to extend his/her support as collaborator, he may do so but without any financial responsibilities on part of HEC.

Question: I couldn't identify the eligibility criteria for Co-PI. I am a lecturer (regular) at UET Peshawar, have done M.Sc and currently enrolled in PhD. Can I be Co-Pi with my professor?

Question: My question is that ,what is the qualification required for work with principal investigator(PI) as a co-investigator? My qualification is BS(Hons) in applied psychology.

Reply: Eligibility criteria for Co-PI is just like as for a PI in terms of his/her qualifications and experience (PhD/MS/M.Phil/having at least 18 years of inline schooling). However, Co-PI may be from an R&D organization other than universities.

Question: Is a Lecturer with 18 years education (MS/M.Phil) with sufficient research experience eligible to be a PI in NRPU project 2017 recently proposed by HEC?

Reply: yes

Question: Further please clarify is it necessary for Co-PI to be affiliated with a University or DAI? Academicians and Researchers working in Colleges are allowed to be Co-PI or Not?

Reply: Eligibility criteria for Co-PI is just like as for a PI in terms of his/her qualifications and experience (PhD/MS/M.Phil/having at least 18 year of inline schooling). However, Co-PI may be from an R&D organization other than universities.

Question: Please let me know the minimum criteria for Co-PI in NRPU research project 2017 proposed by HEC.

Reply: Eligibility criteria for Co-PI is just like as for a PI in terms of his/her qualifications and experience (PhD/MS/M.Phil/having at least 18 year of inline education). However, Co-PI may be from an R&D organization other than universities.

Question: Is it allowed to Researchers working in Public universities with Sixteen years education and one year Clinical diploma in Psychology to work as Co-PI in NRPU 2017?

Reply: No

Question: Two research assistants, an MS student and a PhD Scholar have been allowed as per Award Letter of the aforesaid project. But PhD student is not available in the department now. Can any other MS/MPhil-qualified candidate be hired from the market for this project?

Reply: Simple reply is no. you have to follow approved plan. if PhD scholar is allowed, same cannot be replaced with an MS/MPhill student etc and vice versa.

Question: I may request the Abbottabad University of Science and Technology (AUST) to grant me contract for full two years (the proposed duration for completion of the project). Would my request for transfer of the project be considered if the university administration responds positively?

Reply: Yes Dr. sahib if contract period is equal to the remaining period of project (duration), plus both universities give you NOC , we have no objection to transfer your approved project from one university to other but your case will have to go through the process for the recommendations of reviewers/evaluators.

Question: I have left my parent university & joined a private university that is eligible for public funding as per notification of P&D Division of HEC. Would you please shift my ongoing project to my new university?

Reply: Dear Sir, as you have left your parent public sector university and have joined new university in a private sector. As per HEC policy you cannot run this project-either you have to transfer it to some regular PI/professor of your previous university or If you want to execute it yourself, you have to submit your appointment letter along with terms and conditions of appointment so that the project may be transferred to new university. However, period of your contract (duration) with new university must be at least equal to remaining period of the project life, and the project will be transferred on the recommendations of reviewers/evaluators. You have to provide following documents as well:

1. NOC from both universities stating that they have no objection on the transfer of this project along with all its assets.
2. Revised hard copy of proposal duly signed and countersigned by head of institution.
3. Submit due annual report, if any.

Question: I have left my parent university and have joined another public sector university. Can I shift my ongoing project to a new PI having relevant experience or to Co-PI of the project from same university?

Reply: Yes you can shift your project to a new PI or Co-PI of same project. However you have to provide following document to HEC:

1. Proof for submission of annual report if it was already due and submitted.
2. Submission of expenditure statement duly verified by university audit division -specimen of same is available on NRPU website under download option.
3. If funds are not yet released to university, then a revised copy of proposal duly singed and countersigned by head of institution.
4. NOC of PI (yourself)/letter of consent for transferring the project from original PI.
5. NOC of university.
6. Letter of Consent of new PI.
7. CV of new nominated PI

Question: I have left my parent university & joined a private university that is eligible for public funding as per notification of P&D Division of HEC. How can my ongoing/approved project be shifted to my new university?

Reply: Please provide following documents for initiating of your case for transferring project from one university to another:

1. A request for transferring project from one university to another university.

2. If funds are not yet released to university, then a revised hard copy of proposal duly signed and countersigned by head of institution of new university.
3. Proof of submission of annual report if it is already due and submitted.
4. Provide expenditure statement duly verified by university audit division -specimen of same is available on NRPU website under download option.

5. NOC from both universities stating that they have no objection on the transfer of this project along with all its assets.
6. Copy of appointment letter along with terms and conditions of appointment.

Question: Faculty members form Social Science may apply for NRPU or Not?

Reply: yes; can apply

Question: If any faculty member submitted project for thematic research 2017 and his / her project is not funded by HEC may resubmit that project for NRPU or not?

Reply: if a project is already rejected, why should HEC spend tax payer money again on re-evaluation of already rejected project. So simple reply is no.

Question: I am already running a HEC NRPU project (funded in 2016) and this time i want to apply for a NRPU and TDF funding. I want to know can I apply this year on both the calls i.e. TDF and NRPU?

Reply: you can apply only either under NRPU or TDF

HIGHER EDUCATION COMMISSION

H-9, ISLAMABAD (PAKISTAN)

Application Form
Start-Up Research Grant Program (SRGP)

1. Details of Principal Investigator (PI)

<table>
<tr><td colspan="5">1-1. Name of PI:</td></tr>
<tr><td colspan="2">1-2. Designation:</td><td colspan="3">1-3. Department:</td></tr>
<tr><td colspan="5">1-4. Name of University/DAI:</td></tr>
<tr><td colspan="5">1-5. CNIC No. of PI:
(attach copy of CNIC)</td></tr>
<tr><td colspan="2">1-6. Cell:</td><td colspan="3">1-7. Email:
(please enter correct email for all future correspondence)</td></tr>
<tr><td colspan="2">1-8. Date of Ph.D. Award
(attach copy of degree)</td><td colspan="3"></td></tr>
<tr><td colspan="2">1-9. Date of Joining University
(attach copy of joining letter)</td><td colspan="3"></td></tr>
<tr><td>1-10. Type of Appointment
☑ tick the relevant

(attach copy of offer letter/contract)</td><td>IPFP
(Faculty members can apply for this within 03 Months from date of joining</td><td>TTS
(Faculty members can apply for this within 06 Months from date of joining</td><td>BPS
(Faculty members can apply for this within 06 Months from date of joining</td><td>Contract
Faculty members on Contract (not less than 1 Year) within 03 Months from date of joining</td></tr>
<tr><td>1-10. Is PI an HEC Scholars?
☑ tick the relevant</td><td>Foreign</td><td colspan="2">Indigenous</td><td>Not HEC Scholar</td></tr>
<tr><td>1-11. Title of Project</td><td colspan="4"></td></tr>
<tr><td>1-12. Duration of Project</td><td colspan="4"></td></tr>
</table>

2. Details of Co-Principal Investigator (Co PI)

<table>
<tr><td colspan="2">2-1. Name of the Co PI:</td></tr>
<tr><td>2-2. Designation:
(must be Asstt Prof. and above)</td><td>2-2. Qualification:
(must be Ph.D)</td></tr>
<tr><td colspan="2">2-3. Department:</td></tr>
<tr><td colspan="2">2-4. Institution/University:</td></tr>
<tr><td colspan="2">2-4. CNIC No. of Co PI:</td></tr>
<tr><td>2-5. Cell:</td><td>2-6. Email:
(please enter correct email for all future correspondence)</td></tr>
</table>

2.7. Type of Appointment ☑ tick the relevant	TTS	BPS	Regular Contract

3. Research Proposal

3-1. Title of the Research Proposal

3-2. Problem Statement (max. 100 words)

3-3. Research Objectives

   1.
   2.
   3.

3-4. Research Methodology (including research plan, experimentation, data collection etc. (max. 250 words)

3-5. Possible Outcomes

3-6. How the present research supplements or differs from your Ph.D. research work? (max. 50 words)

4. Budget Estimates

4-1. Lab Equipment/Machines/Apparatus

This may include necessary lab equipment, machines and apparatus to carry out the research. The applicant will have to justify the procurement of equipment and apparatus in the context of his/her research proposal. An applicant may demand lab equipment within Start-up Research Grant maximum permissible limit of Rs. 500,000.

Please note that:

(a) Applicant must attach 03 quotations from registered vendors to justify the cost of the equipment and apparatus if the total worth of the budget head exceeds the limit of PKR 100,000/-

(b) *Refrigerator, chiller, UPS, digital camera, multimedia and air-conditioner are not allowed in SRGP*.

Item	Justification	Amount (Rs.)
	Sub-Total	

4-2. Chemicals/Glassware/Consumables/Accessories

The applicant may propose the chemicals, glassware, lab consumables and allied accessories for lab use keeping in view the nature of the research project. **The applicant must attach a list of the items (along with quantity and cost) with the proposal**. Maximum limit within this head is Rs. 500,000.

Item	Justification	Amount (Rs.)
	Sub-Total	

4-3. Field Visits

The applicant may include the cost of field visits in the proposal. This may include travel cost by air or by road, POL to official vehicle, rent a car service etc. The maximum limit under this head is Rs. 10,000 depending upon the nature of the project.

Visits (from - to)	Justification	Amount (Rs.)
	Sub-Total	

4-4. Sample Analysis

The applicant may include cost of sample analysis if the analytical facilities are not available within the host university. **The applicant needs to mention the number of samples to be analyzed and the name of service provider institution.** For guidance please review HEC Access to Scientific Instrumentation Policy at HEC website. The maximum limit under this head is Rs. 75,000.

Name of Test	No. of Samples	Rate/Test (Rs.)	Amount (Rs.)
		Sub-Total	

4-5. Computer, Printer etc.

The applicant may include Laptop, Computer, and Printer for lab and personal use. **This facility is not available to those scholars/faculty who have got laptop under any of government or university schemes (PM Laptop Scheme, CM Laptop Scheme or any other) within last two years.** Anyhow, they may procure printer and scanner if required. The maximum limit for laptop/computer is Rs. 60,000 -75,000, and Printer 20,000 – 35,000. The total limit under this head is Rs. 100,000.

Item	Justification	Amount (Rs.)
	Sub-Total	

4-6. Studentship

The applicant may propose to hire the services of one final year undergraduate student or master student **for a maximum period of 6 months** to work in the research project. The students will be paid Rs. 10,000 per month in case of final year undergraduate and Rs. 15,000 per month in case of master student.
(attach the details (Name, Subject, Reg #, Session, Current Semester, CNIC and Contact Details) of student, hired for the project duly countersigned and stamped by HoD)

Category	Rate/Month (Rs.)	Period (months)	Amount (Rs.)
B.S Final Year			
MS Student			
		Sub-Total	

4-7. Office/Lab Furniture

The applicant may propose lab and/or office furniture up to maximum limit of Rs. 25,000.

Item	Rate (Rs.)	Quantity	Amount (Rs.)
		Sub-Total	

4-8. Stationery

The applicant may propose stationery up to maximum limit of Rs. 20,000.

Item	Rate (Rs.)	Quantity	Amount (Rs.)
		Sub-Total	

4-9. Others

Item	Amount (Rs.)
Honorarium P.I. (max. Rs. 30,000)	
Honorarium Co P.I. (max. Rs. 20,000)	
Contingencies/Unforeseen (max. Rs. 10,000)	
University Overhead Charges (max. Rs. 10,000)	
Sub-Total	

Grand Total (Rs.)	

Undertaking and Endorsement

I hereby undertake and solemnly affirm that:

- I am not a defaulter of any HEC scholarship Program (foreign and indigenous) or any other scheme.
- I have not received any Lap top from any Government Scheme within last two years.
- The information provided above is true to the best of my knowledge and belief.
- If the grant is provided, I shall be solely responsible for its proper utilization.
- All the supporting documents submitted are authenticated.

Signature of PI   Signature of Co PI

<div style="border:1px solid black; padding:1em;">

Endorsed by (Head of University/Degree Awarding Institute)

Vice Chancellor/Rector   Official Stamp

Sign:_____

Name:_____

Dated:

</div>

Important Notes:

- Please submit one copy of the proposal (duly bound and **properly flagged** for the signature page, budget pages and all attachments)

- Ensure to attach 03 Quotations (in original) for permanent Lab equipment if the total worth of the budget head is exceeds Rs. 100,000.

- Ensure to attach detailed list (with quantity and cost of each item) (in original) for Lab Chemicals/Glassware/Consumables/Accessories.

- Ensure to attach the details (Name, Subject, Reg #, Session, current semester, CNIC and contact detail) of student, hired for the project duly countersigned and stamped by HoD.

- Ensure to attach the CVs of PI & Co P with the proposal.

- Attach a copy of the Ph.D. degree (English Translation if original is in other language)

- Attach a copy of CNIC

- The TTS & BPS PI must attach the Joining report & Appointment Letter.

- The IPFP PI must attach the IPFP award letter and Joining report.

HIGHER EDUCATION COMMISSION

H-9, ISLAMABAD (PAKISTAN)

Application Form
University- Industry Technology Support Program (UITSP)

A.   TITLE OF PROPOSED PROJECT

B1.   RESEARCH DOMAIN

☐ Product Development/ Improvement   ☐ Process Development/ Improvement

B2.STATE FIELD OF RESEARCH AND SPECIALIZATION (For example; Major: Process Industry Specialization: Sugar Industry)

Major   _____   Specialization
_____

C.   PROJECT DIGEST. Describe the proposed research using (about 250 words)   geared towards the non-specialist reader.

PRINCIPAL INVESTIGATOR (from University / Institution)

D1. PRINCIPAL INVESTIGATOR NAME (full with no initials)		D2.HIGHEST DEGREE	D3. POSITION
D4. DEPARTMENT/SECTION	D5.UNIVERSITY/INSTITUTION	D6. OFFICIAL MAILING ADDRESS	

D7. Telephone:(area code, number and extension)   Fax: (Area code, number)   Email:

E: CO-PRINCIPAL INVESTIGATOR (from Collaborating Industry)

E1. Co-PRINCIPAL INVESTIGATOR NAME (full with no initials)	E2. HIGHEST DEGREE	E3. POSITION

E4. SECTION / UNIT	E5. FACTORY / INDUSTRY	E6. OFFICIAL MAILING ADDRESS

E7. Telephone:(area code, number and extension) Fax: (Area code, number) Email:

F1. PROPOSED DURATION OF PROJECT: (*in months*)	F2. PROPOSED STARTING DATE

F3. TOTAL FUNDS REQUESTED RS.	F3. A HEC COMPONENT RS.	F3. B INUDSTRY COMPONENT RS.

SIGNATURE OF PRINCIPAL INVESTIGATOR Date	SIGNATURE OF CO-PRINCIPAL INVESTIGATOR Date

ENDOSEMENT OF THE HEAD OF INSTITUTION (Vice-chancellor/Rector of University, Director of Degree-awarding Institution) Signature & Date Name Title: Address: Phone FAX E-mail	ENDORSEMENT OF THE HEAD OF INDUSTRIAL ORGANIZATION Signature & Date Name Title: Address: Phone FAX E-mail

PROJECT DETAILS

1. PROJECT SUMMARY

Describe the proposed research (using (about 250 words)

2. PROPOSED GOALS/OBJECTIVES (please identify quantifiable goals)

Please clearly identify the output in the form of a product or process, need or relationship to industry and also identify other end-users of your output/product.

GOALS/OBJECTIVES (please quantify your objectives in case of applied research)

1.

2.

3.

4.

5.

6.

7.

3. INTRODUCTION (not to exceed one page)

The introduction should consist of three paragraphs; the first paragraph should indicate the scientific and/or commercial basis on which the project is based. The second paragraph should introduce the precise nature of the project, and the final paragraph should indicate the proposed objectives in the light of the first two paragraphs and explain clearly what the reader will see in the main body of the proposal.

(PLEASE ATTACH ONE SHEET ONLY)

4A. BACKGROUND AND METHODOLOGY OF THE PROPOSED RESEARCH (Not to exceed two pages)

A comprehensive and upto-date justification for the proposed program for technology development, industrial growth, and contribution to national economy.

(PLEASE ATTACH TWO SHEETS ONLY)

4B. RESEARCH PLAN: SCHEDULE/PHASING (Preferably with a time-chart not to exceed one page)

(PLEASE ATTACH ONE SHEET ONLY)

4C. REFERENCES (cited in 3, 4A & 4B; not to exceed two pages)

(PLEASE ATTACH TWO SHEET ONLY)

5. IMPACT

Impact of proposed research on aspects such as transfer of research results into the economy in order to implement innovation, effects on import substitution and/or export enhancement, and on technology-oriented human-resource development. Please also identify other end-users of the research results.

6. PROJECT PARTNERS (information on Industry)

Please give a brief introduction of the collaborating industry, especially information on turnover, import/export profile, stock exchange listing etc. Please indicate the portion of the proposed research program to be carried out at the Partner's organization. Also state that how and where the Partner's budgetary contribution will be utilized.

7. FACILITIES AND FUNDING

7A. Facilities: equipment available for the research project IN THE HOST UNIVERSITY/INSTITUTION & THE COLLABORATING OGRANIZATION

7B. Scientific Personnel (at the PI's institution)
 	
      a.   Available
 	
      b.   Required*
 	
*Involvement of research students is encouraged.

7C. Other funding available for the proposed studies (if any)

8A. PRINCIPAL INVESTIGATOR

A brief resume of research accomplished in the last 05 years. Please specify title of the research proposal(s), duration, funding source(s) and award amount(s).

1. Please attach C.V.
2. Number of Publications during the last five years & page   National: _____   Please see pages_____ of CV number on the C.V. where these publications are listed   International:____ Please see pages: ____ of CV
3. Number of research projects completed & page number   Basic: _____ Please see pages _____ of CV where this information appears   Applied: _____ Please see pages_____ of CV

8B. CO-PRINCIPAL INVESTIGATOR

A brief resume highlighting achievements/ experience, specially concerned with the present proposal

9A. ESTIMATED BUDGET FOR THE PROPOSED RESEARCH PERIOD (Rs. In Million)

DESCRIPTION	YEAR 1		YEAR 2		Total Amount	
	HEC	Industry	HEC	Industry	HEC	Industry
A. Salaries and Honorarium						
PI: One month/year of basic salary @						
Co-PI: One month basic salary for the entire duration @						
Subtotal:						

B. Permanent Equipment (Please attach invoice/quotation and expected delivery date for items costing over Rs 0.1 Million)						
Subtotal:						

C. Expendable Supplies						
Subtotal:						

9A. ESTIMATED BUDGET FOR THE PROPOSED RESEARCH PERIOD (Rs. In Million)-continued

DESCRIPTION	YEAR 1		YEAR 2		Total Amount	
	HEC	Industry	HEC	Industry	HEC	Industry
D. Others						
D1. Literature, documentation, online literature search, contingencies, postage, etc.						
Subtotal:						

D2. Local Travel (Destination and Purpose)						
Subtotal:						

D3. Miscellaneous						
Audit Fee (Max. Rs 10,000)						
Accountant Fee (Max Rs. 10,000)						
Subtotal:						
Subtotal (D1 + D2 + D3):						

E. Indirect cost (University overheads) 02% of Total direct costs to of the university portion meet office support, utilities, etc.)		Nil		Nil		Nil
Grand Total (A + B + C + D + E):						
Total Budget HEC + Industry Components						

10B. JUSTIFICATION (Please justify your request in a background of the existing facilities available at the host Institute.)

A. **Salaries & Allowances** (All positions, other than PI and Co-PI, must be fully justified. Please give qualifications/requirements of each of the new full-time positions requested for in the Proposal.)

B. **Permanent Equipment** (Please identify major items (over Rs. 25,000). Major pieces of equipment costing over Rs. 0.1 million must be fully justified. Minor items (under Rs. 25,000) may be lumped into one.)

C. **Expendable supplies**

D. **Other Costs.** (Travel must be justified.)

Form No. HEC/R&D/SEMINARS/F-004A

HIGHER EDUCATION COMMISSION

H-9, ISLAMABAD (PAKISTAN)

Application Form
Grant for Organizing Seminars, Conferences & Symposiums

1	**DETAILS OF EVENT**			
	Event Type *(Please tick the appropriate option)*	Conference	Seminar	Symposium
	Major Discipline *(Please tick the appropriate option)*	Agriculture	Biological Sciences	Chemical Sciences
		Engineering	Medical Sciences	Physical Sciences
		Social Sciences	Any other *(Please specify)*	
	Title Event			
	Venue of the Event			
	Date(s) of the Event			
	Scope of the Event *(Please also indicate the target audience/participants)*			
	Relevance and Scientific Significance of the Event with Reference to Existing National Needs *(If necessary please attached additional sheet)*			

	Collaborating Institutions *(HEC encourages collaborations among institutions working in similar disciplines)*				

Previous Conference/ Seminar/Symposium organized by the Department during last 2 years - If any

Title	Date	Sponsors	Cost (Rs.)

2	**Details of the Organizer(s)**	
	Organizing University/DAI	
	Name of Focal Person	
	Designation	
	Department/Institute	
	Correspondence Address	
	Contact Details	Phone: Fax:
		Cell: Email:
	(Please attach a 2-page CV of the focal person mentioning the major scientific contributions relevant to the topic of the event)	

3	**DETAILS OF THE INVITED SPEAKERS**	
	Number of Foreign Invited Speakers	
	Number of National Invited Speakers	
	Expected Number of Participants from Host University/Institution	
	Expected Number of Participants from Other Universities/Institutions	
	Please attach a list of Foreign and National Invited Speakers, their CVs, Abstract of Presentation.	

4	**TOTAL ESTIMATED COST OF THE EVENT**		
	Item	**Amount (Rs.)**	
	Remuneration for Invited Speakers		
	Accommodation for Invited Speakers		
	Air Travel for Invited Speakers		
	Entertainment		
	Publication		
	Stationery		
	Any Other		

	Total				
5	**FINANCIAL ASSISTANCE PROVIDED BY OTHER SPONSORS**				
	Item	**Amount (Rs.)**		**Sponsor**	
	Remuneration for Invited Speakers				
	Accommodation for Invited Speakers				
	Air Travel for Invited Speakers				
	Entertainment				
	Publication/ Stationery				
	Any Other				
	Total				
6	**FINANCIAL ASSISTANCE REQUESTED FROM HEC**				
	Item	**Rate (Rs.)**	**Quantity**	**Total Amount (Rs.)**	
	Remuneration for Foreign Invited Speakers *(@Rs. 10,000 per person – maximum 5 Speakers)*				
	Remuneration for National Invited Speakers *(@ Rs.5,000 per person – maximum 10 Speakers)*				
	Accommodation for Foreign Invited Speakers *(@ Rs. 15,000 per night per person – maximum 5 Speakers)*				
	Accommodation for National Invited Speakers *(@ Rs.6,000 per night per person – maximum 10 Speakers)*				
	Travel for Foreign Invited Speakers *(maximum 5 Speakers)*	Please provide details as per attached format			
	Travel for National Invited Speakers *(maximum 10 Speakers)*	Please provide details as per attached format			
	Entertainment *(Lunch @ Rs. 350 and Tea @ Rs. 70 per person – maximum Rs. 200,000)*	Please provide details as per attached format			
	Publication *(Including cost of publishing the proceedings, banners, brochures etc.)*	Please provide details as per attached format			
	Stationery *(Only consumable items)*	Please provide details as per attached format			
	Remuneration for Focal Person and Support Staff *(@ 10% of HEC approved grant – min. Rs. 30,000 and max. Rs. 100,000)*	Please provide details as per attached format			
	Contingencies *(unforeseen expenses – maximum Rs. 10,000)*	Please provide details as per attached format			
	Total				

7	**Registration Fee**		
	Number of participants	Registration Fee/ Participant (Rs.)	Total Expected Income from Registration (Rs.)
	A reasonable Registration fee needs to be charged from participants.		
8	**UNDERTAKING BY THE APPLICANT**		
	I hereby undertake and affirm that: - All the information provided above is true to the best of my knowledge and belief. - If the grant is provided, I shall solely be responsible for its proper utilization, adjustment with used air ticket and other receipts of expenditure. - All the supporting documents submitted are authenticated. SIGNATURES OF THE FOCAL PERSON OFFICE STAMP WITH DATE SIGNATURE OF RECTOR/VICE CHANCELLOR/DIRECTOR		

Format of Requisite Details

(i) **Travel for Foreign Invited Speakers**

SN	Name of the Foreign Speaker	Traveling From (name of the country)	Estimates cost of Air Ticket (Rs.)
1			
2			
3			
4			
5			
	Total		

(ii) **Travel for National Invited Speakers**

SN	Name of the National Speaker	Traveling From (name of the city)	Estimates cost of Air Ticket (Rs.)
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
	Total		

(iii) **Publications**

SN	Item	Quantity	Rate (Rs.)	Amount (Rs)

(iv) **Stationery**

SN	Item	Quantity	Rate (Rs.)	Amount (Rs)

(v) **Remuneration**

SN	Name of Person	Role in Event Management	Amount (Rs)

CHECK LIST OF ATTACHMENTS

Please ensure that relevant documents are attached with the Application Form.

1.	Have you attached the list of Foreign Invited Speakers?	Yes	No
2.	Have you attached CV of Foreign Invited Speakers?	Yes	No
3.	Have you attached abstracts of presentation of Foreign Invited Speakers?	Yes	No
4.	Have you attached the list of National Invited Speakers?	Yes	No
5.	Have you attached CV of National Invited Speakers?	Yes	No
6.	Have you attached abstracts of presentation of National Invited Speakers?	Yes	No
7.	Have you attached your brief CV (2-3 pages)?	Yes	No
8.	Have you attached the brochure of the event along with the program of the event?	Yes	No
9.	Have you attached the list of Organizing Committee?	Yes	No
10.	Have you attached the item wise details of the publication and stationery items along with quantity and rate?	Yes	No

<u>Signature of the Focal Person</u>

Form No. HEC/R&D/SEMINARS/F-004B

HIGHER EDUCATION COMMISSION
H-9, ISLAMABAD (PAKISTAN)

Application Form
Grant for Organizing Workshops

1	**DETAILS OF EVENT**			
	Major Discipline *(Please tick the appropriate option)*	Agriculture	Biological Sciences	Chemical Sciences
		Engineering	Medical Sciences	Physical Sciences
		Social Sciences	Any other *(Please specify)*	
	Title of the Workshop			
	Venue of the Workshop			
	Date(s) of the Workshop			
	Scope of the Workshop *(Please also indicate the target audience/participants)*			
	Relevance and Scientific Significance of the Workshop with Reference to Existing National Needs *(If necessary please attached additional sheet)*			

	Collaborating Institutions *(HEC encourages collaboration among institutions working in similar disciplines)*			
	Previous Conference/ Seminar/Symposium/Workshop organized by the Department during last 2 years - If any			
	Title	Date	Sponsor	Cost (Rs.)

2	**Details of the Organizer(s)**		
	Organizing University/DAI		
	Name of Focal Person		
	Designation		
	Department/Institute		
	Correspondence Address		
	Contact Details	Phone: Fax:	
		Cell: Email:	
	(Please attach a 2-page CV of the focal person mentioning the major scientific contributions relevant to the topic of the event)		

3	**DETAILS OF THE RESOURCE PERSONS**	
	Number of Foreign Resource Persons	
	Number of National Resource Persons	
	Expected Number of Participants from Host University/Institution	
	Expected Number of Participants from Other University/Institution	
	Please attach a list of Foreign and National Resource Persons with their designation, Area of Specialization and Institution.	

4	**TOTAL ESTIMATED COST OF WORKSHOP**		
	Item	**Amount (Rs.)**	
	Remuneration for Resources Person		
	Accommodation for Resources Person		
	Air Travel for Resources Person		
	Entertainment		
	Publication/ Stationery		
	Any Other		

	Total			

5	FINANCIAL ASSISTANCE PROVIDED BY OTHER SPONSORS		
	Item	**Amount (Rs.)**	**Sponsor**
	Remuneration for Resources Person		
	Accommodation for Resources Person		
	Air Travel for Resources Person		
	Entertainment		
	Publication/ Stationery		
	Any Other		
	Total		

6	FINANCIAL ASSISTANCE REQUESTED FROM HEC			
	Item	**Rate (Rs.)**	**Quantity**	**Total Amount (Rs.)**
	Remuneration for Foreign Resource Persons *(@ of Rs. 10,000 per person – maximum persons)*			
	Remuneration for National Resource Persons *(@ of Rs.5,000 per person – maximum 10 Persons)*			
	Accommodation for Foreign Resource Persons *(@ of Rs. 15,000 per night per person – maximum 5 Persons)*			
	Accommodation for National Resource Persons *(@ of Rs.6,000 per night per person – maximum 10 Persons)*			
	Travel for Foreign Resource Persons *(maximum 5 Persons)*			
	Travel for National Resource Persons *(maximum 10 Persons)*			
	Entertainment *(Lunch @ Rs. 350 and Tea @ Rs. 70 per person – maximum Rs. 200,000)*			
	Publication *(Including cost of publishing the manual, banners, brochures etc.)*	Please attach the detailed break up		
	Stationery *(Only consumable items)*	Please attach the detailed break up		
	Chemical/Consumables for Workshop	Please attach the detailed break up		
	Remuneration for Focal Person and Support Staff *(@ 10% of HEC approved grant – min. Rs. 30,000 and max. Rs. 100,000)*	Please attach the detailed break up		
	Contingencies *(unforeseen expenses – maximum Rs. 10,000)*			

	Total			

7	**Registration Fee**		
	Number of participants	Registration Fee/ Participant (Rs.)	Total Expected Income from Registration (Rs.)
	A reasonable Registration fee needs to be charged from participants.		

8	**UNDERTAKING BY THE APPLICANT**
	I hereby undertake and affirm that: • All the information provided above is true to the best of my knowledge and belief. • If the grant is provided, I shall solely be responsible for its proper utilization, adjustment with used air ticket and other receipts of expenditure. • All the supporting documents submitted are authenticated. SIGNATURES OF THE FOCAL PERSON OFFICE STAMP WITH DATE SIGNATURE OF RECTOR/VICE CHANCELLOR /DIRECTOR

Format of Requisite Details

(vi) **Travel for Foreign Resource Persons**

SN	Name of the Foreign Speaker	Traveling From (name of the country)	Estimates cost of Air Ticket (Rs.)
1			
2			
3			
4			
5			
	Total		

(vii) **Travel for National Resource Persons**

SN	Name of the National Speaker	Traveling From (name of the city)	Estimates cost of Air Ticket (Rs.)
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
	Total		

(viii) **Publications**

SN	Item	Quantity	Rate (Rs.)	Amount (Rs)

(ix) **Stationery**

SN	Item	Quantity	Rate (Rs.)	Amount (Rs)

(x) **Chemical/Consumables**

SN	Item	Quantity	Rate (Rs.)	Amount (Rs)

(xi) **Remuneration**

SN	Name of Person	Role in Event Management	Amount (Rs)

CHECK LIST OF ATTACHMENTS

Please ensure that relevant documents are attached with the Application Form.

1.	Have you attached the list of Foreign Resource Persons?	Yes	No
2.	Have you attached CV of Foreign Resource Persons?	Yes	No
3.	Have you attached abstracts of presentation of Foreign Resource Persons?	Yes	No
4.	Have you attached the list of National Resource Persons?	Yes	No
5.	Have you attached CV of National Resource Persons?	Yes	No
6.	Have you attached abstracts of presentation of National Resource Persons?	Yes	No
7.	Have you attached your brief CV (2-3 pages)?	Yes	No
8.	Have you attached the brochure of the event along with the program of the event?	Yes	No
9.	Have you attached the list of Organizing Committee?	Yes	No
10.	Have you attached the item wise details of the publication and stationery items along with quantity and rate?	Yes	No

Signature of the Focal Person

Form No. HEC/R&D/SEMINARS/F-004C

HIGHER EDUCATION COMMISSION

H-9, ISLAMABAD (PAKISTAN)

Feedback Form
Grant for Organizing Seminars, Conferences, Symposiums & Workshops

1	**Focal Person's Profile**	
	Name	
	Designation	
	Department/Institute	
	University/DAI	
	Correspondence Address	
	Contact Details	Cell: Email:
2	**Conference/Seminar Details**	
	Title of the Event	
	Event Date(s)	
	Venue	
3	Focus of the Conference/Seminar/Workshop	
4	Outcomes of the Conference/Seminars/Workshop (in the form of recommendations, improved skills etc.)	

5	**Opportunities Emerged for National/ International Collaboration during the Event**
6	**Planned Follow up of the Seminar/Conference/Workshop**

Signature and Name of the Grantee   Signature of Head of Department

Dated: _____

Feedback Form duly signed by the Head of Department needs to be submitted to HEC along with Reimbursement Claim.

Form No. HEC/R&D/SEMINARS/F-004D

HIGHER EDUCATION COMMISSION

H-9, ISLAMABAD (PAKISTAN)

Adjustment Form
Grant for Organizing Seminars, Conferences, Symposiums & Workshops

Applicant and Event Details

Name	
CNIC/Passport No.	
University/DAI	
Contact Details	Cell: Email:
HEC Award Letter No. & Date:	
Please attach a copy of HEC Award Letter for Ready Reference	

Expenditure Details

Item	Approved Cost (Rs.)	Actual Expenditure (Rs.)	Remarks (if any)
Remuneration			
Accommodation			
Travel			
Entertainment			
Publication			
Stationery			
Chemicals & Consumables			
Contingency			
Total			

Certified that the above expenditures have been incurred on the above mentioned event. It is further certified that all the codal formalities and accounting procedures have been followed for the reimbursement of the expenditures. Please attach a copy of the seminar/conference proceedings/abstract.

SIGNATURE OF THE GRANTEE   UNIVERSITY AUDITOR
                                                 (Name and Official Stamp)

TREASURER/DIRECTOR (FIN)   HEAD OF INSTITUTION
(Name and Official Stamp)   (Name and Official Stamp)

Date:_____

Form No. HEC/R&D/Book Award/F-005A

HIGHER EDUCATION COMMISSION
H-9, ISLAMABAD (PAKISTAN)

Application Form
Best Book Award

Please fill out the form and provide four (4) copies/sets of the application form along with four (4) Books. Add lines as needed.

I. Personal Information	
1. Name:	2. Nationality
3. Gender: ☐ Male ☐ Female	4. Place of Birth:
5. Date of Birth (dd/mm/Year):	6. Age:
7. NIC #	8. Present Position:
9. Postal Address:	10. Name of Current Institution and Address:

11. **Contacts:** a) Phone	b) Cell:	c) E-mail:

II. Professional Details		

1. Research Domain

☐ Natural Sciences
☐ Biological Sciences
☐ Agricultural Sciences
☐ Health Sciences
☐ Pure Engineering
☐ Computer Science/Engineering
☐ Social Sciences
☐ Management Sciences
☐ Arts/Humanities/Languages

2. Field of Research and Specialization [For example; (Major: Chemistry, Specialization: Organic); (Major: Economics, Specialization: Development Economics); (Major: Energy, Specialization: Solar) etc.]

Major _____

Specialization _____

III. Academic Qualifications:			
Degree Held	**Year Awarded**	**Field of Study**	**Institution**

IV. Book for the Award
Please provide information about the Book for which you are applying for the award. The Book should be at the level of graduate research work, published by a reputed publisher.

Title:
Year of Publication:
Publisher:
List of authors as it appears on the Book:
Number of Pages:
Number of editions published:
Number of copies sold:
Number of citations:

a) **List the institutions at which the work was performed, and the percentages of work at each institution.**

b) **Please explain why do you think this Book deserves the Best Book Publication Award (subject nature, originality, impact on the profession, quality etc.)**

V. Resume

Please attach a 2 page resume highlighting your accomplishments

VI. References

Please provide a list of five academic/professional references :

Reference-1:
Name:
Position:
Phones:
Email:
Postal Address:

Reference-2:
Name:
Position:
Phones:
Email:
Postal Address:

Reference-3: Name: Position: Phones: Email: Postal Address:
Reference-4: Name: Position: Phones: Email: Postal Address:
Reference-5: Name: Position: Phones: Email: Postal Address:
By signing below and submitting this Application Form, I--confirm that the information I have provided above is true to the best of my knowledge and that I authorize you to contact the references provided above for further information.

Signature:	Date:

Please send four (4) copies/sets of complete application form along with four (4) Books to the following address (Only hard copies are admissible):

CONTACT:

Ms. Noshaba Awais

 Director (R&D)

Higher Education Commission

H-9, Islamabad

E-mail: nawais@hec.gov.pk

Form No. HEC/R&D/Innovator Award/F-005B

HIGHER EDUCATION COMMISSION

H-9, ISLAMABAD (PAKISTAN)

Application Form
Best Innovator Award

Please fill out the form and attach necessary documents to this application. Add lines as needed.

I. Personal Information

1. Name:	2. Nationality:
3. Gender: ☐ Male ☐ Female	4. Place of Birth:
5. Date of Birth (dd/mm/Year):	6. Age:
7. CNIC #	8. Present Position:
9. Postal Address:	10. Name of Current Institution and Address:

11. **Contacts:** a) Phone	b) Cell:	c) E-mail:

II. Professional Details

1. Research Domain

☐ Natural Sciences
☐ Biological Sciences
☐ Agricultural Sciences
☐ Health Sciences
☐ Pure Engineering
☐ Computer Science/Engineering
☐ Social Sciences
☐ Management Sciences
☐ Arts/Humanities/Languages

2. Field of Research and Specialization [For example; (Major: Chemistry, Specialization: Organic); (Major: Economics, Specialization: Development Economics); (Major: Energy, Specialization: Solar) etc.]

Major _____

Specialization _____

III. Academic Qualifications:			
Degree Held:	**Year Awarded**	**Field of Study:**	**Institution:**

IV. Resume

Please attach a 2 page resume highlighting your accomplishments

V. Patent Information:

Please attach patent award/issuance certificate

Patent Title:
Patent No:
Year of grant:
Name of country/countries where patent has been filed/granted:

VI. Invention Category:

☐ Design   ☐ Device   ☐ Method   ☐ Product   ☐ Other

Name of Institution/s where the idea was conceived:

VII. Description of Invention:

Please provide brief description of the Invention

VIII. Applications of Invention:

What are the immediate and/or future applications of the invention?

IX. Novelty and Usefulness:

What are its novel and unusual features? What problems does it solve? What are the advantages that your invention provides other than available solutions?

X. Reduction to Practice:

Is work on the invention continuing? Are there any limitations to be overcome or other tasks to be done prior to practical application? Is there any test data available? Have products, apparatus or compositions, etc., actually been made and tested?

XI. Commercial Partners:

Has the technology been licensed to anyone..... Yes: ☐   **No:** ☐

Names and addresses (if known) of potential commercial partners:

XII. Competitors:

Companies presently offering comparable technology (if known):

Company Name	Brand name	Product

XIII. Profitability:

Has the innovation been commercialized? ..... Yes: ☐   No: ☐

If yes, has any profit been earned?   Yes: ☐   No: ☐

If yes, please provide data on gross and net yearly profits:

 If no, please indicate projected profits based on market research

XIV. Development/Further Research:

What further research and development is necessary or desirable before showing the invention for a potential industrial license?

XV. Inventor Information:

Please list names of all the inventors/assignee institutions.

1) Name_____Position_____ Department _____ Business Address_____ Business Phone_____Business Fax_____ Email Address_____ Home Address_____ Citizenship CNIC#	

1) Name_____Position_____
Department _____
Business Address_____
Business Phone_____Business Fax_____
Email Address_____
Home Address_____
Citizenship   CNIC#

2) Name_____Position_____
Department
Business Address_____
Business Phone_____Business Fax_____
Email Address_____
Home Address_____
Citizenship   CNIC #

3) Name_____Position_____
Department _____
Business Address_____
Business Phone_____Business Fax_____
Email Address_____
Home Address_____
Citizenship   CNIC #

By signing below and submitting this Application Form, I-- confirm that the information I have provided above is true to the best of my knowledge.

Signature :	**Date:**

Please send three (3) sets of complete application forms to the following address;
(Only hard copies are admissible)

CONTACT:

Ms. Noshaba Awais

Director (R&D)

Higher Education Commission

H-9, Islamabad

E-mail: nawais@hec.gov.pk

Form No. HEC/R&D/Research Paper Award/F-005C

HIGHER EDUCATION COMMISSION
H-9, ISLAMABAD (PAKISTAN)

Application Form
Best Research Paper Award

Please fill out the form and attach copy (prints) of the research paper to this application. Add lines as needed and provide two (2) sets of complete application.

I. Personal Information

1. Name:	2. Nationality:
3. Gender: ☐ Male ☐ Female	4. Place of Birth:
5. Date of Birth (dd/mm/Year):	6. Age:
7. CNIC #	8. Present Position:
9. Postal Address:	10. Name of Current Institution and Address:

11. **Contacts:** a) Phone	b) Cell:	c) E-mail:

II. Professional Details

1. Research Domain

☐ Natural Sciences
☐ Biological Sciences
☐ Agricultural Sciences
☐ Health Sciences
☐ Pure Engineering
☐ Computer Science/Engineering
☐ Social Sciences
☐ Management Sciences
☐ Arts/Humanities/Languages

2. Field of Research and Specialization [For example; (Major: Chemistry, Specialization: Organic); (Major: Economics, Specialization: Development Economics); (Major: Energy, Specialization: Solar) etc.]

Major _____

Specialization _____

85

III. Academic Background:

Qualifications:

Degree Held:	Year Awarded:	Field of Study:	Institution:

IV. Research Paper for the Award

Please provide information about the research paper for which you are applying for the award.
Please attach copy (prints) of the published research paper.

Title:

Year:
Number of Pages:
Name of Publishing Journal:
List of authors as it appears in the journal:
Impact Factor **(Source: Web of Science):**
Number of Citations: **(Source: Web of Science):**

a) **List the institutions at which the work was performed, and the percentages of work at each.**

b) **Originality (describe the original ideas in your work, and how it advanced the previous work done in that area):**

c) **Impact of your work on the following:**
i)   On the field of research
ii)   On the economy
iii)   On the society

V. Resume

Please attach a 2 page resume highlighting your accomplishments

VI. References

Please provide a list of five academic/professional references :

Reference-1: Name: Position: Phones: Email: Postal Address:
Reference-2: Name: Position: Phones: Email: Postal Address:
Reference-3: Name: Position: Phones: Email: Postal Address:
Reference-4: Name: Position: Phones: Email: Postal Address:
Reference-5: Name: Position: Phones: Email: Postal Address:
By signing below and submitting this Application Form, I--------------------------------------- confirm that the information I have provided above is true to the best of my knowledge and that I authorize you to contact the references provided above for further information.

Signature :	Date:

Please send two (2) sets of complete application forms to the following address :
(Only hard copies are admissible)

CONTACT:

Ms. Noshaba Awais

Director (R&D)

Higher Education Commission

H-9, Islamabad

E-mail: nawais@hec.gov.pk

Form No. HEC/R&D/Young Researcher Award/F-005D(S&E)

HIGHER EDUCATION COMMISSION

H-9, ISLAMABAD (PAKISTAN)

Application Form
Young Research Scholar Award for Sciences and
Engineering Disciplines

Please fill out the form and attach necessary documents as proof to this application. Add lines as needed and provide two (2) sets of complete application form.	
I. Personal Information	
1. Name:	2. Nationality:
3. Gender: ☐ Male ☐ Female	4. Place of Birth:
5. Date of Birth (dd/mm/Year):	6. Age:
7. CNIC #	8. Present Position:
9. Postal Address:	10. Name of Current Institution and Address:

11. **Contacts:** a) Phone	b) Cell:	c) E-mail:

II. Professional Details

1. Research Domain

☐ Natural Sciences
☐ Biological Sciences
☐ Agricultural Sciences
☐ Health Sciences
☐ Pure Engineering
☐ Computer Science/Engineering

2. Field of Research and Specialization [For example; (Major: Chemistry, Specialization: Organic); (Major: Computer Science, Specialization: Artificial Intelligence); (Major: Energy, Specialization: Solar) etc.]

Major _____

Specialization _____

III. Academic Qualifications:			
Degree Held:	**Year Awarded**	**Field of Study:**	**Institution:**

IV. Research Paper Publications as **Principal Author** (Source: Web of Science)

List all papers published as **Principal Author** (main/corresponding) that are indexed in **Web of Science.** Please attach an original copy of the published abstract.

1. Title:
Year:
Number of Pages:
Name of Publishing Journal:
List of authors as it appears in the journal:
Impact Factor of journal **(Source: web of science):**
Number of Citations **(Source: web of science)**:

2. Title:
Year:
Number of Pages:
Name of Publishing Journal:
List of authors as it appears in the journal:
Impact Factor of journal **(Source: web of science):**
Number of Citations **(Source: web of science)**:

V. Research Paper Publications as **Co-Author** (Source: Web of Science)

List all papers published as **Co-Author** (up to 5 authors) that are indexed in **Web of Science.**
Please attach an original copy of the published abstract.

1. Title:
Year:
Number of Pages:
List of authors as it appears in the journal:
Impact Factor of journal **(Source: web of science):**
Number of Citations **(Source: web of science)**:

VI. Review Papers (Source: Web of Science)

a) Review Papers as Principal Author that are indexed in **Web of Science.**
    Please attach an original copy of the published abstract.
1. Title:
Year:
Number of Pages:
List of authors as it appears in the journal:
Impact Factor of journal **(Source: web of science)**:
Number of Citations **(Source: web of science)**:

b) Review Papers as Co-Author (up to 5 authors) that are indexed in **Web of Science.**
    Please attach an original copy of the published abstract.
1. Title:
Year:
Number of Pages:
List of authors as it appears in the journal:
Impact Factor of journal **(Source: web of science)**:
Number of Citations**(Source: web of science):**

VII. Books

1. Books Written: Graduate Level Research Oriented Books published by Reputed Publishers.
  (Please attach title page, table of contents pages etc.)

a)	Books as **Principal Author**: Title: Publisher: Year of publication: List of authors as it appears:
b)	Books as **Co-author**: Title: Publisher: Year of publication: List of authors as it appears:
c)	Books as **Editor**: Title: Publisher: Year of publication: List of authors as it appears:

2. Chapters in Books: Graduate Level Research Oriented Books published by Reputed Publishers:
  (Please provide a copy of book chapter)

a)	Chapter/s as **Principal Author:**
b)	Chapter/s as **Co-author:**

VIII. Patents

1. International Awarded Patents:
   (Must provide proof of patent award)
Title:
Patent number:
Year of award:

2. International Filed Patents:
   (Must provide proof of patent application)
Title:
Application number:
Year:

3. National Awarded Patents:
   (Must provide proof of patent award)
Title:
Patent number:
Year of award:

4. National Filed Patents:
   (Must provide proof of patent application)
Title:
Application number:
Year:

IX. Thesis Supervised

1. Supervisor for PhD Thesis (Awarded Degrees)

(Must provide a copy of the signed thesis title page)
Student Name: Institution: From: To: Thesis Title:

2. Co-supervisor for PhD Thesis (Awarded Degree)
(Must provide a copy of the signed thesis title page)

Student Name: Institution: From: To: Thesis Title:

3. Supervisor for MPhil Thesis (Awarded Degree):
(Must provide a copy of the signed thesis title page)

Student Name: Institution: From: To: Thesis Title:

4. Co-supervisor for MPhil Thesis (Awarded Degree):
(Must provide a copy of the signed thesis title page)

Student Name: Institution: From: To: Thesis Title:

X. Presentations at International Professional Conferences

Must provide a copy of the abstract from the published conference proceedings
List conference title, date, paper title with authors listed exactly as in the proceedings.

1. Invited Keynote

1.
2.

2. Paper Presentation

1.
2.

XI. Presentations at Local Conferences

1. Invited Keynote

1.
2.

2. Paper Presentation

1.
2.

XII. External Research Grants Obtained (Other than own institution and IPFP) **for** Rs**1 million & above**

For each grant you obtained, describe the project, year, funding agency and the amount in Rs.

(Must provide proof of granted funds as PI or Co-PI with Project completion report duly verified by the VC/Rector)

1. Project/Products Commercialized

2. Indigenous/applied Research

3. Competitive/basic Research

XIII. Citation by others (Source: Web of Science)

XIV. Awards & distinctions in the professional career

XV. Impact of Your Work

Describe the impact of your work in **300 – 500 words** on the following fields duly **validated by the Dean/VC**.

i) On the field of Research

ii) On the Economy

iii) On the Society

XVI. Resume

Please attach a 2 page resume highlighting your accomplishments

XVII. References

Please provide a list of five academic/professional references :

Reference-1:

Name: Position: Phones: Email: Postal Address:
Reference-2: Name: Position: Phones: Email: Postal Address:
Reference-3: Name: Position: Phones: Email: Postal Address:
Reference-4: Name: Position: Phones: Email: Postal Address:
Reference-5: Name: Position: Phones: Email: Postal Address:
By signing below and submitting this Application Form, I--- confirm that the information I have provided above is true to the best of my knowledge and that I authorize you to contact the references provided above for further information.

Signature :	Date:

Please send two (2) sets of complete application forms to the following address:
(Only hard copies are admissible)

CONTACT:

Ms. Noshaba Awais

Director (R&D)

Higher Education Commission

H-9, Islamabad

E-mail: nawais@hec.gov.pk

Form No. HEC/R&D/Young Researcher Award/F-005D(SS)

HIGHER EDUCATION COMMISSION
H-9, ISLAMABAD (PAKISTAN)

Application Form
Best Young Research Scholar Award for Social Sciences / Management Sciences / Arts & Humanities

Please fill out the form and attach necessary documents to this application as proof. Add lines as needed and provide two (2) sets of complete application forms.

I. Personal Information

1. Name:	2. Nationality:
3. Gender: ☐ Male ☐ Female	4. Place of Birth:
5. Date of Birth (dd/mm/Year):	6. Age:
7. CNIC #	8. Present Position:
9. Postal Address:	10. Name of Current Institution and Address:

11. **Contacts:** a) Phone	b) Cell:	c) E-mail:

II. Professional Details

1. Research Domain

☐ Social Sciences
☐ Management Sciences
☐ Arts/Humanities/Languages

2. Field of Research and Specialization [For example; (Major: Economics, Specialization: Development Economics) etc.]

Major _____

Specialization _____

III. Academic Qualifications:

Degree Held:	Year Awarded	Field of Study:	Institution:

IV. Research Paper/Review Paper publications as **Principal Author** (Source: Web of Science)

List all papers published as **Principal Author** (main/corresponding) that are indexed in **Web of Science.** Please attach an original copy of the published abstract.

1. Title:
Year:
Number of Pages:
Name of Publishing Journal:
List of authors as it appears in the journal:
Impact Factor of journal **(Source: web of science):**
Number of Citations **(Source: web of science)**:

2. Title:
Year:
Number of Pages:
Name of Publishing Journal:
List of authors as it appears in the journal:
Impact Factor of journal **(Source: web of science):**
Number of Citations **(Source: web of science)**:

V. Research Paper/Review Paper publications as **Co-Author** (Source: Web of Science)

List all papers published as **Co-Author** (up to 5 authors) that are indexed in **Web of Science.**
Please attach an original copy of the published abstract.

1. Title:
Year:
Number of Pages:
List of authors as it appears in the journal:
Impact Factor of journal **(Source: web of science):**
Number of Citations **(Source: web of science)**:

VI. Research Paper published in **HEC recognized X category** journals as **Principal Author**

List all papers published as **Principal Author** (main/corresponding) in **HEC recognized X category** journals**.** Please attach an original copy of the published abstract.

1. Title:
Year:
Number of Pages:
Name of Publishing Journal:
List of authors as it appears in the journal:

VII. Research Paper published in **HEC recognized X category** journals as **Co-Author**

List all papers published as **Co-Author** (up to 5 authors) in **HEC recognized X category** journals**.**
Please attach an original copy of the published abstract.

1. Title:
Year:
Number of Pages:
Name of Publishing Journal:
List of authors as it appears in the journal:

VIII. Research Paper published in **HEC recognized Y category** journals as **Principal Author**

List all papers published as **Principal Author** (main/corresponding) in **HEC recognized Y category** journals**.** Please attach an original copy of the published abstract.

1. Title:
Year:
Number of Pages:
Name of Publishing Journal:
List of authors as it appears in the journal:

IX. Research Paper published in **HEC recognized Y category** journals as **Co-Author**
List all papers published as **Co-Author** (up to 5 authors) in **HEC recognized Y category** journals. Please attach an original copy of the published abstract.
1. Title: Year: Number of Pages: Name of Publishing Journal: List of authors as it appears in the journal:
X. Books
1. Books Written: Graduate Level Research Oriented Books published by Reputed Publishers.   (Please attach title page, table of contents pages etc.)

a)   Books as **Principal Author**:
   Title:
    Publisher:
   Year of publication:
   List of authors as it appears:

b)Books as **Co-author**:
   Title:
   Publisher:
   Year of publication:
   List of authors as it appears:

c) Books as **Editor**:
   Title:
   Publisher:
   Year of publication:
   List of authors as it appears:

2. Chapters in Books: Graduate Level Research Oriented Books published by Reputed Publishers: (Please provide a copy of book chapter)
a)   Chapter/s as **Principal Author:**
b)   Chapter as **Co-author:**
XI. Thesis Supervised (Awarded Degree)
1. Supervisor for PhD Thesis (Awarded Degrees)   (Must provide a copy of the signed thesis title page)
Student Name: Institution: From: To: Thesis Title:
2. Co-supervisor for PhD Thesis (Awarded Degree)   (Must provide a copy of the signed thesis title page)
Student Name: Institution: From: To: Thesis Title:
3. Supervisor for MPhil Thesis (Awarded Degree):   (Must provide a copy of the signed thesis title page)
Student Name: Institution:

From:	To:
Thesis Title:	

4. Co-supervisor for MPhil Thesis (Awarded Degree): (Must provide a copy of the signed thesis title page)
Student Name:
Institution:
From: To:
Thesis Title:

XII. Presentations at International Professional Conferences
Must provide a copy of the abstract from the published conference proceedings List conference title, date, paper title with authors listed exactly as in the proceedings.
1. Invited Keynote
1. 2.
2. Paper Presentation
1. 2.

XIII. Presentations at Local Conferences
Must provide a copy of the abstract from the published conference proceedings List conference title, date, paper title with authors listed exactly as in the proceedings.
1. Invited Keynote
1. 2.
2. Paper Presentation
1. 2.

XIV. External Research Grants Obtained (Other than own institution and IPFP) **for 1 million and above**
For each grant you obtained, **describe the project, year, funding agency and the amount in Rs.** (Must provide proof of granted funds as PI or Co-PI with Project completion report duly verified by the VC/Rector)
1. Grants obtained as Principal Investigator (PI)
2. Grants obtained as Co-PI

XV. Citation by others (Source: Web of Science)

XVI. Awards & distinction in the professional career

XVII. Impact of Your Work
Describe the impact of your work on the **community/industry/practitioners** or end users in **300 – 500** words duly **validated by the Dean/VC.**

XVIII. Resume
Please attach a 2 page resume highlighting your accomplishments

XIX. References
Please provide a list of five academic/professional references :
Reference-1: Name: Position: Phones: Email: Postal Address:
Reference-2: Name: Position: Phones: Email: Postal Address:
Reference-3: Name: Position: Phones: Email: Postal Address:
Reference-4: Name: Position: Phones: Email: Postal Address:
Reference-5: Name: Position: Phones: Email: Postal Address:

By signing below and submitting this Application Form, I-- confirm that the information I have provided above is true to the best of my knowledge and that I authorize you to contact the references provided above for further information.	
Signature :	Date:

Please send two (2) sets of complete application forms to the following address:
(Only hard copies are admissible)

Ms. Noshaba Awais

Director (R&D)

Higher Education Commission

H-9, Islamabad

E-mail: nawais@hec.gov.pk

Form No. HEC/R&D/ASIP/F-006

HIGHER EDUCATION COMMISSION
H-9, ISLAMABAD (PAKISTAN)

Application Form
Access to Scientific Instrumentation Program (ASIP)

Part 1: Applicant's Details	
1-1. Name of the Applicant (Dr/Mr./ Ms.) :	
1.2. CNIC :	1-3.: Province :
1-4. Cell No :	1-5. Email ID:
1-6. Status/Title/Designation :	
1-7. Department :	
1-8. Institution :	
1-9.Supervisor's Name (attach brief profile)	
1-10. Designation :	1-11. Email ID:
1-12 HEC Indigenous Scholar ☐ Yes ☐ No	1-13. Submission Date of Application :
Part 2: Research Details	
2-1. **Type of Research**: ☐ MS/M.Phil. Thesis ☐ Ph.D. Thesis ☐ Faculty Research	
2-2. **Major Discipline** : ☐ Chemical Sciences ☐ Bio-Sciences ☐ Physical Sciences ☐ Agricultural Sciences ☐ Engineering ☐ Other (please specify) : -	
2-3. Has the research synopsis/proposal been approved by the competent forum (Faculty Board, Research Board, Director Research etc.) in the university: ☐ Yes ☐ No • If '**Yes**', provide copy of approval of identified research proposal.	
Part 3: Details of the Sample Analysis	

3-1. Details of Tests

S.#	Name of Test	No. of Samples	Rate per Test (Rs.)	Total Cost (Rs.)
Total				

Additional Information (if any) regarding sample test(s) methodology etc. may be provided on separate sheet

3-2. Name of the service providing institution where the test(s) facility is available

3-3. Any specific reason to get the sample(s) analyzed from the above mentioned institution

3-4. Consent of Service Provider with test's rates (please attach a copy)

Part 4: Declarations

4-1. **Declaration by the Researcher**

I hereby solemnly declare that the above mentioned test(s) results will be used for academic/ research purposes only and that the results will not be used for any commercial study or consultancy service.

_____
Signature of the Applicant

_____
Countersigned by the Research Supervisor   (Official Stamp of Research Supervisor)

> 4-2. **Declaration by the Head of Department/Director ORIC**
>
> I hereby solemnly declare that the above requested sample analyses facilities are not available in this university.
>
>
> _____
>
> Signature of the Head of Department/Director ORIC   (Official Stamp of HOD/Director ORIC)
>
>
>
> _____
>
>   Countersigned by Dean   (Official Stamp of Dean)
>
>   Dated :

Following documents need to be attached with the application form :
  i.   One page summary of the research proposal including description of the analyses/tests needed to be performed from other institution.
  ii. Copy of approval of identified research proposal.
  iii. Consent (letter) of service provider showing rates of sample analysis
  iv. One para profile of Research Supervisor, stating field of study, highest qualification, recent five publications titles

Form No. HEC/R&D/MSE/F-007

HIGHER EDUCATION COMMISSION
H-9, ISLAMABAD (PAKISTAN)

Application Form
Grant for Maintenance of Scientific Equipment (MSE)

1. DETAILS OF APPLICANT:

Name:	Designation:
Department:	Phone:
E-mail:	Fax:
Address:	

2. DETAILS OF EQUIPMENT: (PLEASE USE EXTRA SHEET IF THERE ARE MORE THAN ONE EQUIPMENT NEEDING REPAIR/ MAINTENANCE)

Name:	Make:
Model:	Year of Manufacture:
Year of Installation:	Cost of Equipment:
Funded by:	Location (Department):
Give Number of Students/Researchers Using it:	When was it last repaired?

3. DETAILS OF MANUFACTURER(S):

Name:	Country of origin:
Address in Pakistan (if any):	

4. PARTS:

Details of the parts to be replaced	
Reasons for replacement	
Give details of accessories, if required	
Give details/reasons if new unit is required as attachment	

5. DETAILS OF PARTS/SERVICES NEEDED WITH THEIR COSTS: (PLEASE ATTACH QUOTATIONS, IN ORIGINAL)

S. No.	PARTS/SERVICES	QUOTATION – 1 (Rs.)	QUOTATION – 2 (Rs.)	QUOTATION – 3 (Rs.)
1.				
2.				
3				

6. NAMES & ADDRESSES OF FIRMS QUOTING ESTIMATES:

S .No.	NAME & ADDRESS OF FIRM	PHONE/ FAX
1.		
2.		
3.		

7. WHO WILL BEAR THE ADDITIONAL COST, IF THE TOTAL ESTIMATE EXCEEDS LIMIT OF RS ONE MILLION ?

8. IF THE EQUIPMENT WAS EVER REPAIRED THROUGH HEC, GIVE DATE

9. DO YOU HAVE TECHNICAL EXPERTISE AVAILABLE TO INSTALL THE SPARE PARTS? (IF 'NO', 'PLEASE INDICATE WHO WILL PERFORM THE INSTALLATION JOB?)

10. AMOUNT OF ASSISTANCE SOUGHT FROM HEC:

Rs._____(Rupees_____)

11. UNDERTAKING BY THE APPLICANT:

I HEREBY AFFIRM AND UNDERTAKE THAT:

- THE INFORMATION PROVIDED ABOVE IS TRUE TO THE BEST OF MY KNOWLEDGE AND AS PER RECORDS AVAILABLE WITH THE UNIVERSITY/INSTITUTION/CENTRE

- IF ASSISTANCE IS PROVIDED I WILL SUPERVISE THE WORK PERSONALLY AND SHOULDER ENTIRE RESPONSIBILITY, ON BEHALF OF MY VICE CHANCELLOR/ RECTOR/DIRECTOR

- I SHALL ADJUST THE AMOUNT OF GRANT WITH PROPER RECEIPTS, DULY VETTED BY THE UNIVERSITY AUDIT SOON AFTER THE COMPLETION OF MAINTENANCE WORK, WITH A CERTIFICATE OF FITNESS OF EQUIPMENT IN QUESTION

- IN CASE OF NON-UTILIZATION OF THE GRANT, I SHALL BE RESPONSIBLE FOR ITS REFUND .

_____   _____

OFFICE STAMP   **SIGNATURE OF APPLICANT**

Date: _____

12. RECOMMENDATIONS FROM VICE CHANCELLOR/ RECTOR OR DIRECTO (IN CASE OF CENTRE/ INSTITUTE):

THIS IS TO CERTIFY THAT THE SPARE PART(S) REQUESTED IS/ARE NECESSARY TO MAKE THE EQUIPMENT SPECIFIED ABOVE OPERATIONAL AND THAT THE SAME CANNOT BE READILY PURCHASED FROM THE INSTITUTION'S OWN FUNDS.

_____   _____

OFFICE STAMP   **SIGNATURE OF VICE CHANCELLOR**

Date: _____

13. PLEASE SEND THE PROPOSAL SUPPORTED WITH THREE QUOTATIONS TO:

UZMA NAZ
Assistant Director (R&D)
HIGHER EDUCATION COMMISSION
Sector H-9 Islamabad
Email : unaz@hec.gov.pk
Ph: 051-90401938 Fax   051 90401902

HIGHER EDUCATION COMMISSION

H-9, ISLAMABAD (PAKISTAN)

Application Form
Patent Filing Support (PFS)

Part 1: Applicant's Details	
1-1. Name of the Applicant (Dr. / Mr. / Ms.) :	
1.2. CNIC :	1-3. Status/Designation :
1-4. Department :	
1-5. Institution :	
1-6. Contact Details :	
Cell :	Email :
1.7-. Name & Designation of the co-Inventors	
1-8- will the institution be the partner of this invention/innovative idea? **Note: *(please note that under Common Law, the institution has de facto rights to all inventions unless otherwise assigned by the institution back to the inventor. In Europe, institutions can file the patent directly as the inventors, while an institution cannot be an inventor in the US applications; however, at the time of filing the application, we include the name of assignee, an institution who owns 100% interest in the patent. This assignment can be made any time.)***	Yes ☐ No ☐
Part 2: Research Details	
2-1. **Type of Research**: ☐ MS/M.Phil Thesis ☐ Ph.D. Thesis ☐ Faculty Research	

2-2. **Major Discipline** : ☐ Chemical Sciences ☐ Bio-Sciences ☐ Physical Sciences

☐ Agricultural Sciences ☐ Engineering ☐ Other (please specify):

2-3. Has the research been published? ☐ No ☐ Yes , If yes, mention the date of publication: Date:_____

Part 3: Give brief summary of the patent idea:

3-1. **Outcome of patent:**

(Additional Information (if any) may be provided on separate sheet)

3-2. Has the application been filed for local patent at Intellectual Property Office Pakistan? If yes, mention the patent application or patent number and date? (note that for an international patent, we need to first file the patent at our home country and are then allowed to file at any foreign country within 12 months time)

3-3. Mention if institution's recommendations letter and market survey are available and attached.

3-4. Mention if any specific business/ industrial partner is ready to take up this patent for further development. (attach the consent letter)

3-5.

Part 4: Declarations

4-1. Declaration by the Researcher

- I hereby solemnly declare that the above mentioned patent idea will be used for academic/ research purposes only and the results will be used for commercialization through the institution whose facilities are used.
- Once the patent is issued I will abide by my institution/HEI/R&D organization's Intellectual Property Laws prevalent at the time. Further , I, the PI of this patent idea agree to report progress of my registered patent and its contribution towards economy and mankind.
- I will fully cooperate with the university/institute/R&D organization concerned for commercialization of the patent and report the same to HEC as and when required.

_____
Signature of the Applicant

_____
Countersigned by the Dean Research   (Official Stamp of Dean Research)

4-2. Declaration by the Head of Department/Director ORIC

I hereby solemnly declare that the above requested patent idea has no prior disclosure and the same has been confirmed through the Prior Art Search. The institution committee on the basis of market survey has ensured the availability of market for this idea if patent is granted/issued (the same is attached with the application).

1. Once a patent is issued/granted to the inventor he/she will be bound to follow his/her institution/HEI/R&D organization's Intellectual Property Laws prevalent at the time.
2. The PI and institute/ organization concerned will be bound to report the progress of his/her registered patent and its contribution towards economy and mankind.
3. It will be the responsibility of university/institute/R&D organization concerned to commercialize the patent and report the same to HEC.

_____
Signature of the Director ORIC   (Official Stamp of Director ORIC)

_____
Countersigned by Vice-chancellor   (Official Stamp of VC)

Dated :

Following documents need to be attached with the application form:
  i.   Market Survey Report
  ii. Minutes of the committee meeting agreeing to file this patent idea.
  iii. Agreement on royalty share according to the IP policy of the institution concerned.
iv. Consent of Industry/Business ready to take this research.

Form No. HEC/R&D/ORICs/F-009

HIGHER EDUCATION COMMISSION
H-9, ISLAMABAD (PAKISTAN)

Application Form
Establishment of Offices of Research, Innovation & Commercialization (ORICs)

(To be filled in by the Registrar of Institution/Director Research along with comments against each parameter)

1-	ORIC PHYSICAL INFRA STRUCTURE				
	Parameter	**Yes / No**	**Details**	**Flag of Annexure**	**Comments / Information**
i.	Temporary building space		Picture + Map	N/A	Mandatory
ii.	Permanent building space			N/A	Mandatory
iii.	One meeting/ conference room			N/A	Mandatory
iv.	Reception area for Administrative assistants			N/A	Mandatory
v.	One office shared by Manager of research Operations and Accountant			N/A	Mandatory
vi.	One office shared by Manager of Research Development and Manager of University-Industrial Linkages			N/A	Mandatory
vii.	One office shared by Manager IP, Publications/ Communications Specialist, and Research Associates			N/A	Mandatory
viii.	Office for Director			N/A	Mandatory
ix.	Established Technology/Business Incubation center			N/A	Optional
2-	AVAILABLE FACILITIES				
	Parameter	**Yes / No**	**Details**	**Flag of Annexure**	**Comments / Information**
i.	Fully furnished office			N/A	
ii.	Computers / Phone and internet service		Email + Phone No.	N/A	
3-	STAFFING/ HR DETAILS (AS PER MINIMUM CRITERIA)				
	Parameter	**Yes / No**	**Full Time / Part Time**	**Name**	**Annex Appointment/ Office Order & Joining Reports**
i.	Director (full time)				
ii.	Manager Research operations & Development (full time)				
iii.	Manager University-Industry linkages and technology transfer (full time)				
iv.	01 Research Associate (full time)				

		Current year	Accumulated	Flag of Annexure	Comments /Information
v.	3 Administrative Assistants (full time)				
vi.	1 accountant (part time)				
vii.	Manager Intellectual Property/Legal Services (optional – may be full time/Part time)				
viii.	1 publications/ communications specialist (part time)				
4-	**RESEARCH SUPPORT AND OUTPUT**				
	Parameter	**Current year**	**Accumulated**	**Flag of Annexure**	**Comments /Information**
i.	Number of ongoing basic research projects				
ii.	Number of ongoing indigenous/applied research projects				
iii.	Number of national collaborative research projects with other universities				
iv.	Number of International collaborative research projects				
v.	Number of national collaborative research projects with Business/ Industry				
vi.	Number of local patents granted to university/faculty				
vii.	Number of international patents granted to university/faculty				
viii.	Number of national/local patents filed by the university/faculty				
ix.	Number of international patents filed by the university/faculty				
x.	Total number of Research Publications				
xi.	Total Number of Seminars/conferences arranged by the university (annually)				

Declaration:
This is to certify that the information provided above is true to the best of my knowledge and belief.
University/Institution: _____ Location: _____

Information provided by (name & Designation): _____

Signature: _____ Date: ____/____/20____ .

 Signature with Official Stamp of Registrar/Director Research: _____

Date: ____/____/20____ Counter Signed by Vice Chancellor/Rector: _____

INSTRUCTIONS
- ✓ Information may be provided as per above table and must be substantiated with the documentary
  evidences (e.g. Office Order and Joining repot etc.) please.
- ✓ Provide the centralized email address i.e oric@qau.edu.pk and Phone No.
- ✓ Qualifications of ORIC Staff, related experience & background may be provided

Form No. HEC/R&D/PPCR/F-011

HIGHER EDUCATION COMMISSION

H-9, ISLAMABAD (PAKISTAN)

Application Form
Pakistan Program for Collaborative Research (PPCR)

1. Type of grant for which you are applying			
(1) Short research visit abroad		(2) Short research visit of foreign faculty to Pakistan	
(3) Academic sabbatical		(3) Short consultancy	
2. Details of Activity			
Title of Activity			
Field of Investigation			
Duration of visit (dates)	From	To	
3. Details of applicant			
Name			
Present position			
Department			
Faculty			
Institution			
Cell No.			
E-mail			
CNIC #			

3.   Details of Co-applicant (If the applicant is going abroad, entre the details of host otherwise give details of the visiting fellow)

Name	
Institutional Affiliation	
Department/Faculty	
Present position	
Specific field of study / interest	
Address	
Telephone	Fax

E-mail	

Brief motivation for visit. Please provide full motivation on a separate sheet as well as a detailed research proposal, including expected significance of the research.

Envisaged outcomes resulting from the trip? Please provide details.

Other outcomes of visit

4. Provisional budget

Travel expenses	Airfare	
	Visa cost	
	Health insurance	
Living/Subsistence Allowance		
TOTAL		

Please attach proof/quotes for the amounts budgeted

Have you also applied elsewhere for funding in this regard (✓ yes/no)	Yes	No

If yes, please give details	

Year in which last Short Course / Short Visit travel grant was received by you through HEC:	

Outcome of previous visit.

5. Endorsement by the Dean (if he/she is not the applicant).

Comments of the Dean	

Recommendation		Strongly supported		Supported		Not supported	
Signature of Dean				Date			
Name in BLOCK letters				Official Stamp			

Attachments:

Please ensure that relevant supporting documents are attached with the application form;

S #	Supporting Documents/Checklist	(Yes/No)
1.	Complete research plan based on the mutually agreed activities	
2.	CV along with publication list of visiting fellow	
3.	CV of foreign/host collaborator	
4.	letter of confirmation (from Director/Dean) of the host institution	
5.	Letter of admission/confirmation of foreign institution (Academic Sabbatical)	
6.	Copy of visiting fellow's terminal academic degree	
7.	Three year post doctorate experience certificate	
8.	Copy of the visiting fellow's passport	
9.	Three (3) Economy class air fare Quotations	
10.	A note to show why a visit is necessary as opposed to using electronic communication	
11.	Complete 2 sets of Application Form	

_____
Signature of Applicant

IMPORTANT

The application must be submitted along with the above documents at least 2 months prior to the visit date. Early submission of application is encouraged. The documents must be attached in above sequence and must be properly tagged.

INCOMPLETE AND LATE APPLICATIONS WILL NOT BE ENTERTAINED

HIGHER EDUCATION COMMISSION
H-9, ISLAMABAD (PAKISTAN)

Application Form
Social Integration Outreach Program (SIOP)

A. **TITLE OF PROPOSED PROJECT**

B. **Discipline:**

C. PROJECT DIGEST. Describe the proposed research using (about 250) words geared to the non-specialist reader.

PRINCIPAL INVESTIGATOR (from University / Institution)

D1. NAME:	D2. HIGHEST DEGREE	D3. POSITION

D4. DEPARTMENT/SECTION	D5. UNIVERSITY/INSTITUTION	D6. MAILING ADDRESS

D7. Telephone :(051-9064 3043 area code, number and extension)   Cell No.   Fax: (Area code, number)

Email:

E: ORIC- Focal Person

E1. NAME:	E2. Designation	E3. Cell No.
E4. Telephone: (area code, number and extension)	E5. Centralized Email ORIC	E6. Official Mailing Address

PROPOSED DURATION OF PROJECT: (Maximum 03 Month)	PROPOSED STARTING DATE
	PROPOSED END DATE

TOTAL FUNDS REQUESTED Maximum Limit: Rs. 8,00,000 (Eight Lac)	HEC COMPONENT	University Component

SIGNATURE OF PRINCIPAL INVESTIGATOR	SIGNATURE OF FOCAL PERSON (ORIC)
Date	Date

Endorsement of I (DIRECTOR ORIC)	Endorsement of II (The Head of Institution
Name:	Name:
Position:	Position:
Phone No:	Phone No:
Cell No.	Cell No.
Email:	Email:
Signature Date_____	Signature Date_____

Form No. HEC/R&D/TDF/F-013

HIGHER EDUCATION COMMISSION

H-9, Islamabad (Pakistan)

APPLICATION FORM FOR TECHNOLOGY DEVELOPMENT FUND

COVER SHEET FOR PROPOSAL

A1.   TITLE OF PROPOSED PROJECT

A2.   CLASSIFICATION/NAME OF PRODUCT/PROCESS/SERVICE TO BE CREATED

A3. List of Contents:

B1. RESEARCH DOMAIN

☐ Product Development/ Improvement ☐ Process Development/ Improvement

B2. STATE FIELD OF RESEARCH AND SPECIALIZATION (For example; PREVIOUS EXPERIENCE WITH INDUSTRIAL RESEARCH)

Major/Specialization _____ Relevant Industry
_____

C1. PROJECT DIGEST. Describe the proposed PROJECT using about 250 words in easy business language.

C2. Patent/IP Search:

1. What is the status of your idea vis-à-vis similar patents?

2. Have you already filed a patent application?

3. If a patent already exists on your idea/concept, then what is your strategy and rationale in commercializing the proposed research?

D. PRINCIPAL INVESTIGATOR (from University / Institution)

D1. PRINCIPAL INVESTIGATOR NAME (full with no initials)		D2. HIGHEST DEGREE	D3. POSITION
D4. DEPARTMENT/SECTION	D5. UNIVERSITY/INSTITUTION	D6. CNIC# Please attach a crossed copy	

Paste or place JPEG passport size photograph

D7. Telephone:(area code, number and extension)

Mobile: Fax: (area code, number) :

Email:

Postal Address:

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E: INDUSTRIAL PARTNER (from Collaborating Industry)

E1. Industrial Partner NAME (full with no initials)	E2. HIGHEST DEGREE	E3. POSITION
E4. SECTION / UNIT	E5. FACTORY / INDUSTRY	E6. OFFICIAL MAILING ADDRESS

E7.Partner Industry Certification/Registration:

NTN/STN:

E8. Telephone:(area code, number and extension)	Fax: (Area code, number)
Mobile:	Email:

F1. PROPOSED DURATION OF PROJECT: (*in months*)	F2. PROPOSED STARTING DATE

F3. TOTAL FUNDS REQUESTED RS.	F3.HEC COMPONENT (UPTO 14Million)	F4- INUDSTRY COMPONENT
	A. 1st YEAR installment RS.___ _____(Million) B. 2nd YEAR installment RS. _____ (Million)	A. 1st YEAR installment RS._____(Million) B. 2nd YEAR installment RS. _____ (Million)

SIGNATURE OF PRINCIPAL INVESTIGATOR	SIGNATURE OF PARTNER INDUSTRY
Date	Date

ENDORSEMENT OF THE HEAD OF INSTITUTION (Vice-chancellor/Rector of University, Director of Degree-awarding Institutions)	ENDORSEMENT OF THE HEAD OF INDUSTRIAL ORGANIZATION
	(Must be stamped)
Signature & Date	Signature & Date
Name Title:	Name Title:
Address:	Address:
Phone	Phone
FAX	FAX
E-mail	E-mail

Project Details

1. PROJECT SUMMARY

Describe the proposed prototype and any research required using about 250 words. Attach sketch/diagrams/photo, if needed, to illustrate your concept.

2. PROPOSED GOALSS/OBJECTIVES (please identify quantifiable goals)

Please clearly identify the output in the form of a **product or process, need or relationship to industry** and also identify other end-users of your output/product.

GOALS/OBJECTIVES (please quantify your objectives in case of Applied research)

1.

2.

3.

4.

5.

6.

7.

3. INTRODUCTION (not to exceed one page**)**

> The introduction should consist of three paragraphs; the first paragraph should indicate the scientific and/or commercial basis on which the project is based. The second paragraph should introduce the precise nature of the project, and the final paragraph should indicate the proposed objectives in the light of the first two paragraphs and explain clearly what the reader will see in the main body of the proposal.
>
> *(PLEASE ATTACH ONE SHEET ONLY)*

4A. BACKGROUND AND METHODOLOGY OF THE PROPOSED RESEARCH (Not to exceed two pages**)**

> A comprehensive and up to-date justification for the proposed program for technology development, industrial growth, and contribution to national economy.
>
> *(PLEASE ATTACH TWO SHEETS ONLY)*

4B. RESEARCH PLAN: SCHEDULE/PHASING (Preferably with a time-chart not to exceed one page**)**

> *(PLEASE ATTACH ONE SHEET ONLY)*

4C. REFERENCES (cited in 3, 4A & 4B; not to exceed two pages)

> *(PLEASE ATTACH TWO SHEETS ONLY)*

5. IMPACT

> Impact of proposed prototype on aspects such as transfers of research results into the economy in order to implement innovation, effects on import substitution and/or export enhancement, and on technology-oriented human-resource development. Please also identify other end-users of the research results. E.g.
>
> 1. Utilisation of local raw materials
> 2. Creation of Employment
> 3. Utilising current skill or creating new skills
> 4. Impact on local manufacturing or service cluster; explain how these will be helpful to move the particular sector up the value chain.
> 5. Solution to current local problems.
> 6. Reverse Engineering (adaptive research) from creation of wealth.
> 7. Export potential and global market possibilities with impact on local job creation. You may gather trade statistics from http://www.trademap.org/

6. Sustainable Development Goals (SDG's) (How and which of the SDG's will be addressed in this study? Justify how the proposed research will contribute to achieve SDG's of Pakistan. For details on SDG's /s please visit:)

- http://undocs.org/A/68/970
- http://www.un.org/sustainabledevelopment/sustainable-development-goals
- http://www.slideshare.net/derekschwabe/the-17-proposed-sustainable-development-goals

7. PROJECT PARTNERS (information on Industry)

Please give a brief introduction of the collaborating industry, especially information on turnover, import/export profile, stock exchange listing etc. Please indicate the portion of the proposed research program to be carried out at the Partners organization. Also state that how and where the Partner's budgetary contribution will be utilized.

8. PROJECT Business Plan/Work plan (Attach the Business Plan for your proposed project)

Please provide an overview of your Business plan to include activities taking place.

Please also provide financial analysis, market value and how the proposed product/process will do business?

9. PROJECT OUTPUT

Please give a brief account of expected output

10. FACILITIES AND FUNDING

10A. Facilities: equipment available for the research project IN THE HOST UNIVERSITY/INSTITUTION & THE COLLABORATING OGRANIZATION

10B. Scientific Personnel (at the PI institution)

    a.   Available

b. Required*

*Involvement of research students is encouraged.

10C. Other funding available for the proposed studies (if any)

11A. PRINCIPAL INVESTIGATOR

A brief resume of research accomplished in the last 05 years. Please specify title of the research proposal(s), duration, funding source(s) and award amount(s). Detailed CV can be placed as annex at the end.

1. Please attach C.V.
2. Number of Publications during the last five years & page pages_____ of CV

    numbers on the C.V. where these publications are listed _____ of CV

    National: _____   Please see

    International: _____   Please see pages :

3. Number of research projects completed & page number _____ of CV

    where this information appears

    pages_____ of CV

    Basic: _____   Please see pages

    Applied: _____   Please see

11B. Industrial Partner (Profile of Partner industry, Accreditation and Certification, Website, Focal Person Contacts. Email, mobile and landline)

A brief Profile highlighting achievements / experience especially concerned with the present proposal. Detailed CV of focal person can be placed as annex at the end.

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│                                                                    │
└──────────────────────────────────────────────────────────────────┘
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11C. CO-PRINCIPAL INVESTIGATOR

A brief resume highlighting achievements/ experience especially concerned with the present proposal. <u>Detailed CV can be placed as annex at the end.</u>

12A. ESTIMATED BUDGET FOR THE PROPOSED RESEARCH PERIOD (Rs. in million, please avoid simple calculations)

HEC will fund up to Rs. 14 Million and there is no limit for Industry but proposals with industrial financial assistance will be preferred. Please submit M.S. Excel sheet separately.

DESCRIPTION	YEAR 1		YEAR 2		Total Amount	
	HEC	Industry	HEC	Industry	HEC	Industry
A. Salaries and Honorarium						
PI: One month/year of initial basic salary (BPS____) @						
Co-PI: One month initial basic salary for the entire duration (BPS_____) @						
Patent filing						
PhD Research associate @ 20,000 PKRs.						
M. Phil Research associate @ 15,000 PKRs.						
Subtotal:						

Prototype Development Cost

B. Permanent Equipment (Please attach invoice/quotation and expected delivery date for items costing over Rs 0.1 Million)						

Subtotal:					

C. **Expendable Supplies**					
Subtotal:					

12A. ESTIMATED BUDGET FOR THE PROPOSED RESEARCH PERIOD (Rs. In million)-continued

DESCRIPTION	YEAR 1		YEAR 2		Total Amount	
	HEC	Industry	HEC	Industry	HEC	Industry
D. Others						
D1. Literatur ; documentation, information, online literature search, contingencies, postage, etc.						
Subtotal:						

D2. Local Travel (Destination and Purpose)						
Subtotal:						

D3. Miscellaneous						
Audit Fee (Max. Rs 10,000)						
Accountant Fee (Max Rs. 10,000)						

Subtotal:						
Subtotal (D1 + D2 + D3):						
E. Indirect cost (University overheads) 02% of Total direct costs to of the university portion meet office support, utilities, etc.)		Nil		Nil		Nil
Grand Total (HEC 1st year A + B + C + D + E) vise versa: Please make sure calculations will be correct.	➡					
Total Budget		HEC: 1st +2nd year		Industry: 1st +2nd year		Total: HEC + Industry Components

13. JUSTIFICATION (Please justify your request in a background of the existing facilities available at the host Institute.)

A.   **Salaries & Allowances** (All positions, other than PI and industrial partner, must be fully justified. Please give qualifications/requirements of each of the new full-time   positions requested for in the Proposal.)

B.   **Permanent Equipment** (Please identify major items (over Rs. 25,000). Major pieces of equipment costing over Rs. 0.1 million must be fully justified. Minor items (under Rs. 25,000) may be lumped into one.)

C.   **Expendable supplies**

D.   **Other Costs.** (Travel must be justified.)

14.

(A) Enlist Three **Academic Evaluators/Experts** from Higher Education Institutions/R&D organizations/Universities (Name, Mobile number, postal and email address information)

1.
2.
3.

 (B) Enlist Two **Industrial Evaluators/Experts** from Industry/Government and Private R&D organizations (Name, Mobile number, postal and email address information)

1.
2.

Signature Principal Applicant   Date:_____

Checklist:

Make sure the following must accompany the application otherwise proposal will not be shortlisted.

1. 3 hard copies with proper Tape binding (no spiral binding will be accepted)   Y/N
2. Soft copy must be emailed to gsarwar@hec.gov.pk.   Y/N
3. Both hard and soft copy must reach well before the deadline.   Y/N
4. Budget submitted on prescribed M.S excel sheet sent with soft copy.   Y/N
5. TDF-Proposal information sheet on prescribed M.S excel sheet sent with soft copy   Y/N
6. Application must be routed through University ORIC or Directorate of Research   Y/N
7. CNIC copy of Principle Investigator   Y/N
8. Passport size photograph   Y/N
9. Industrial Support letter from partner industry   Y/N
10. Partner Industry NTN/STN provided   Y/N
11. Industrial Partner certification (Registration, ISO or any other etc.)   Y/N
12. Mobile/cell phone number and personnel & official email   Y/N
13. Authentication from Head of the institution and submission through ORIC   Y/N
14. Authentication from Head of the industry not necessary on the form (a separate letter on industrial letter pad will serve the purpose properly addressed to head of university/institution)   Y/N
15. CV of PI   Y/N
16. CV of Co PI   Y/N
17. CV of Industrial Partner   Y/N
18. All documents (required) must be in one application file (soft and hard).   Y/N
19. Quotations of the equipment & Supplies (if cost is more than PKRs.0.1 million)   Y/N
20. Project Key Performance indicators against which performance will be evaluated   Y/N

Guidelines to Develop TDF Proposals

1. Background

The Pakistan Higher Education Commission (HEC) medium-term development plan explicitly puts ideals of knowledge economy at the centre of development for this 5 year period: to unlock and exchange the knowledge and expertise held by the universities for the benefit of communities and economies.

As per the vision 2025 of the Planning Commission, in a resource constrained economy, education and technology inputs especially those available at our universities should act as engine of growth. The proposed project will create employment opportunities for our educated and technical manpower and help develop indigenous enterprises to create appropriate jobs and stop the brain drain.

The Proposed project will enhance University-Industry interaction for problem solving and for development.

2. Guidance Notes

Proposals will be considered for partnership project with clearly defined objectives and outcomes. Proposals should also demonstrate how the partnership will be further developed and sustained following the initial project.

In view of various priorities of participating institutions/universities, following are the key focus areas.

KEY AREAS

1. Telecommunication, Information and Technology/Computers (applications in Govt. services, health, textile, agriculture, dairy etc.)
2. Engineering Sciences, Micro Electronics, Water, Power Energy and Fleet Management
3. Biotechnology and Allied fields (in health, agriculture, textile, leather, dairy etc.)
4. Material Sciences/Man Made Material (Nanotechnology)
5. Robotics, Defense and Military needs
6. Any other applied discipline which is inductive or conducive to success of products developed or upscale the process of Industrial level manufacturing.

3. Possible Partners

The proposals need to be academia-industry joint projects leading to products or services which solve a current problem or identify a new opportunity; are marketable, leading to positive cash-flows. In another way the local Industrial R&D can join nearby academic research experts of the university to solve their problem, upscale the process or prototype their innovative idea to a successful business.

This grant can be used by the applicant to develop partnerships of their universities with business community. All proposals will be expected to have identified how their collaboration will develop partnerships outside the university with active industrial sector.

4. Business Model

Executive Summary

This executive summary will follow the title page. The summary should tell the reader what you want.

Business Description

The business description usually begins with a short description of the industry. When describing the industry, discuss the present outlook as well as future possibilities. You should also provide information on all the various markets within the industry, including any new products or developments that will benefit or adversely affect your business.

Market Strategies

Market strategies are the result of a meticulous market analysis. A market analysis forces the entrepreneur to become familiar with all aspects of the market so that the target market can be defined and the company can be positioned in order to garner its share of sales.

Competitive Analysis

This is to determine the competitors' strengths and weaknesses within your market, strategies that will provide you with a distinct advantage, the blockades that can be developed in order to prevent competition from entering your market, and any weaknesses that can be exploited within the product development cycle.

Design & Development Plan

This is to provide investors with a description of the product's design, chart its development within the context of production, marketing and the company itself, and create a development budget that will enable the company or product to reach its goals.

Operations & Management Plan

The operations and management plan is designed to describe just how the business functions on a continuing basis. The operations plan will highlight the logistics of the organization such as the various responsibilities of the management team, the tasks assigned to each division within the company, and capital and expense requirements related to the operations of the business.

In case of introducing new product in existing industry or industry problem solution the operations plan will highlight the logistics of the existing industry/organization such as the various responsibilities of the management team, the tasks assigned to each division within the company in regard to this product or process induction in industry, and capital and expense requirements related to this intervention.

Financial Factors

Every successful business plan depends on financial data at its back, but that doesn't mean it's any less important than up-front material such as the business concept and the management team.

5. Eligibility

Applicants must be based within a Higher Education Institution in Pakistan and have backing by their Head of the Institution. Co-PI could be from local Industrial Partner or R&D institutions.

6. Duration and value of award

- Duration of each research project will be two years.

- **Total grant for each proposal: (Maximum upto) Rs14.00 Million**
- Proposals with partner industry contribution (in cash or kind) will be preferred

7. Application Process

Proposals for funding should be submitted on the standard Application Form available on the HEC website Application Forms can be downloaded from the following link http://hec.gov.pk/site/TDF

Completed applications must be routed to HEC on following address through the University ORIC or Directorate of Research where the applicant team is located dually endorsed by head of University and Partner Industry. Proposals will be received till November 15, 2017 and evaluated on first come first serve bases.

8. Evaluation Process

There will be a 3 stage approach to evaluating proposals:

a. Initial Screening: This is designed to eliminate technically ineligible proposals. It will be undertaken by the Evaluation Panel. A prioritised list of projects for further evaluation will be drawn up.

b. External Assessment and Evaluation Panel: All projects on the priority list will go for external peer review. Three experts of the subject field including representative of respective business/industry field.

c. Evaluation Panel: The recommended proposals will be defended by the Principle Investigators of the project in an open seminar organized by HEC. The seminar will be attended by Academia and industry representatives.

d. Approval of Project Committees: The award of grant will be confirmed on the basis of this defence and approval of the research executive Committee as well as TDF steering committee. The project steering committee has the power to revise the above procedure if deem appropriate.

9. Monitoring

Each partnership may be monitored over the course of the project and can be called to pitch the progress or product display.

10. Reporting

Each partnership is required to submit to HEC a mid-term report six months after the start of the partnership, an end-of-year report and a final report on completion of the project. These will be both technical and financial; the items to be covered will be specified at the time of finalising the contract.

11. Data Protection Statement

All information on the application forms of proposals that are successful and funded by HEC will have details made public and it is a condition of application to the scheme that you agree to this.

Please confirm that you agree to the use of the data in the application in this way.

12. Signatures, Submission and Deadline

Please follow the advice set out in these guidelines carefully. Applications should be submitted on the application forms available on the website.

If necessary signed letters of support from Partner Industrial/R&D institutional heads or equivalent can be submitted separately.

13. Proposal Information sheet

Proposal information sheet in M.S. excel is given with dummy data entered for the basic information of the proposal must be filled by Principle Investigator and send with the soft copy in email.

14. Application Procedure

The deadline for submission of proposals is **15th November, 2017; however, applications will be processed on first come first serve bases.**

The paragraph numbering below follows the section numbers on the Application Form

1. **Project Title**

   Please choose a title that uniquely describes your project and clearly identifies the primary subject area for the activity.

2. **Key Subject Words**

   Please provide up to 6 key words that most closely relate to the application area.

3. **Project Objectives**

   Please summarise the main objectives of the proposed project in terms that might be understood by a non-specialist. Please provide in a maximum of 100 words.

4. **Proposed Start and End Dates for your project**

   The project will commence once the contract has been signed and will run for no more than 24 months.

5. **Information about applicants**

   The details of the Project Team Leaders in each institution and their contact details should be provided.

6. **Overview of the Project**

   Please provide an overview of the proposed project in a language suitable for a general audience. Include the project objectives, proposed process and anticipated outputs and impact.

7. **Proposed Goals / Objective:**

   Please clearly identify the output in the form of a product or process, need or relationship to non-university partner

8. **Project Business Development Plan / Work plan for the Project**

   Please provide an overview of your Business plan to include activities taking place. Please note that this Business plan will form the basis of your contract and progress will be measured against working towards it's delivery.

9. **Proposed Project Outputs:**

   Please summarise briefly the intended outputs of the proposed co-operation – both qualitative and quantitative. Please try to fill all columns.

10. **Other sources of funding**

    In this section please include details of any funding which will be received by the project which is from a source outside of the participating institutions. Include details on the exact nature & amount of this funding, the donor organisation and the anticipated time frame.

11. **Proposed Team (Principle Investigator, Industrial Partner and Co PI)**
    This section details about project team and their profile.

12. **Financial Proposal**

    Please summarise the estimated costs (PKRs in Million) over the 2 year period of the project and present this information in prescribed **M.S excel spreadsheet** and same will be mentioned in the main application form.

    You are also required to complete the shorter table in the application setting out your requests for funding. Please refer to the section in the Guidelines that set out what activities can be funded and what are ineligible. Note that funds cannot be employed to contribute towards the salaries of staff other than allowed nor for administration, estate costs or other institutional overheads.

    Air fares should normally be the most reasonable economy class fare.

13. JUSTIFICATION

Please justify your requests for staff, Salaries Allowances, expandable Supplies and permanent equipment in background of the existing facilities available at the host Institute.

14. Referees/Reviewers

Enlist 3 academic and 2 Industrial Reviewers.

15. Checklist

Checklist is provided to have a holistic review of proposal developed whether it followed all guidelines which for sure made application pass successfully initial scrutiny phase.

Hard copies (3 sets) through surface mail should reach before 00:00 hrs on 15th November, 2017.

Ghulam Sarwar
Project/Field Coordinator
Technology Development Fund
Research & Development
Higher Education Commission
H-9 Islamabad
051-90401925

Completed applications should be submitted electronically (Microsoft word) as well to: gsarwar@hec.gov.pk; Please give title your e-mail as (TDF-PI Name-University name Abbreviation) i.e. (TDF-Ghulam Sarwar-NUML)

Once submitted, we cannot accept any changes to the application.

If you have any questions about your application please contact
Dr. M. Latif advisor R&D mlatif@hec.gov.pk

Guidelines to the REVIEWERS

FOR

Review OF TECHNOLOGY Development Project PROPOSALS

Please note that the suggested criteria are meant for guidance only and you may choose additional or any other factors for a better assessment of the Technology Support Proposal. If so, please specify those factors.

I. Principal Investigator (PI) & Industrial Partner:

PI & **Industrial partner** are the key persons responsible for implementing the research project and to ensure its completion within the stipulated duration by achieving all the stated objectives and goals of the research proposal. Therefore, the success of the research project depends upon the intellectual and managerial skills of the PI & industrial partner. Please assess the PI & industrial partner in terms of :

- Academic qualifications
- Expertise with relevance to the proposed research commercialization
- Professional experience
- Productivity in terms of number and quality of industrial applications of research done so far

II. Proposed goals/objectives:

The goals are all or some of the following:

- Relevance to major / minor industry
- Towards development of a product/process
- To improve an existing product/process
- To help reduce imports/ increase export
- To provide a substitute for an imported product/process
- To remove a technological difficulty or to provide an indigenous solution to technological problem
- Will the end-user / partner industry benefit from the proposed research?
- Is the partner industry willing to cooperate actively and promises to use the output (product/process)?

III. Background to the Research Problems to be addressed & research plan:
- Are the proposed solutions, developed product and/or process well related to the needs of the beneficiary industry?
- **Proposed Research Plan:** Is technically feasible, otherwise doable in Pakistan and lead to achievement of objectives?

IV. Budget:
- Reasonability of request in various categories vis-à-vis justification provided – Is it convincing?

V. Institutional Facilities:
- How do they correlate to the proposed work? Is the requisites infrastructures available at the participating institutions?

VI. Impact:
- Will the research results be applicable to other industries or institutions?

REVIEW REPORT
(To be completed by the Reviewer)

1. **Project Title:**
2. **Name of the Principal Investigator:**
3. **Name of the University/Department:**
4. **Name of Co-Principal Investigator …………………………………………………..**
5. **Name of the Industry/Department …………………………………………………**
6. **Name of the Reviewer**
7a. **Weightage Table**

Description	Total Weightage	Score Obtained	Comments, if any
I. Principal Investigator: qualification; expertise; professional experience towards applied research; any NDA or MTA signed or License given to industry, Patents if any etc.	25		
II. Industrial partner expertise; professional experience; Industry R&D experience ,patents (if any) etc.	15		
III. Proposed Goals/ Objectives. How well are the goals conceived realistic and doable?	15		
IV. Background to and review of the Research Problem, market survey and proposed Business plan	15		
V. Budget reasonability and justification	10		
VI. Institutional facilities with both parties.	10		
VII. Impact	10		
Total:	**100**		

7b **Grading of Weightage Score:**
Please tick the relevant box

70 or more……Business Research proposal considered RECOMMENDED
<70 to 60 ……Business Research proposal recommended with minor revision
<60 to 50……Business Research proposal considered NOT RECOMMENDED

8.   Review of budget estimates:

Cost Estimates	Proposed	Recommended	Reasons for amendments, if any
I. Salaries & Allowances			
II. Permanent Equipment for prototype development			
III. Expendable supplies			

IV.   Others
 	
    D1: Literature, documentation, information etc
 	
    D2: Local travel
 	
    D3. Unforeseen/ miscellaneous			

V. Indirect Cost			
VI. Audit/Accountant Fee (As per HEC Policy)			
VII. Indirect cost @ 2% (As per HEC policy) /15% for notifiedORICs			
VIII. Patent Filing Fee			
IX. Local Travel Seminars, Workshops, symposium			

9. **Recommendations:**

A. if recommended give a brief justification:

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B. if not recommended, give reasons:

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C. If referred back, give guidelines for revision:

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Dated: _____   Signature   _____
Phone: _____
Fax: _____   Name & designation: _____
Email: _____   Address: _____
                           _____
                           _____

Business Model Judging /Evaluation Form

The following criteria are to be used to evaluate written business plans:

NOTE: *Scoring based on 1 (lowest) to 5 (highest), with 3 being of the caliber to advance with amendments.*

Team Name (PI; Co PI and Industrial partner):_____
Name of Institute/Organization of PI:_____
_____
Judge Name (Your name will not be associated with the feedback sent to the researcher/applicant (this is just scoring record):_____

Serial No		Score based on 1 (lowest) to 5 (highest):
1.	**Principal Investigator:** qualification; expertise; professional experience towards applied research; (any NDA or MTA signed or License given to industry, Patents if any etc.) Do you believe the team has presented a feasible solution?	
2.	**Customer problem/need to be solved:** Does the team provide a clear and compelling presentation of the problem, its scope and the impact on customers?	
3.	**Product/Service Solution:** Does the team describe the key features and benefits, pricing, current state of development and proprietary position- Solution was clearly understood? Will the proposed product/process utilize local raw materials, human resource and is matched with partner production capacity?	
4.	**Market Opportunity/ Value proposition:** Have they adequately described the market and economic opportunity? (Clear description of the size (RS), growth potential and composition of the market) Have they clearly stated their value proposition? Is it a viable model? (Clear and convincing description of how the new /value added product/service addresses the customer need and benefits are quantified)	
5.	**Competitive Strategy:** Has the team analyzed its competitive space? (Who is doing similar things in their market?) Does the summary clearly identify the company's/or product innovation (in case initial competitive advantage or differentiator?) Does the team have an adequate strategy for defending their market position?	

6.	**Go to Market Strategy:** Is it clear how the product will reach its initial customer? Does the summary clearly identify a sales strategy? Is the distribution plan clearly defined and reasonable?	
7.	**Management Team:** Does this management team have the skills required to execute the plan? Does this team have the experience to lead a new venture? (if applicable to this project submitted) If this management team is weak in either necessary skills or experience do they list the advisors and mentors?	
8.	**Operations:** Does the team have a plan for production, operating complexity and resources required?	
9.	**Financials:** Are the financials consistent with the overall plan? Are the assumptions realistic? Are contingencies and exit strategies addressed? Does the plan describe the funding/resources required to execute the plan? Are the financials complete and properly annotated? Requirements: • Income Statements 5 years (first year by quarter) • Balance Sheet 5 years • Cash Flow Statement or Sources and Uses of Funds 5 years (first year by quarter).	
10.	**Offering and future Investment Analysis:** Would you invest? The amount, timing, and use of the future investment sought are clear.	

TOTAL SCORE OBTAINED: _____

Signature of the Evaluator: _____

Higher Education Commission

No._____

Dated: _____

PI (Name):
Institution:

Subject: **Award of the Grant to project titled**: _____ **under HEC project Establishment of Technology Development Fund (TDF) call 2016-17**

I am pleased to inform you that the HEC-TDF Steering Committee has approved the funding of subject project under the Establishment of Technology Development Fund (TDF) Program.

The HEC will release an amount of Rs. _____**million** for this proposal in two installments on yearly basis as given below:

Year	HEC Component
1	
2	
Total	

Detailed approved breakup of the budget is enclosed herewith.

Please find enclosed the specimen of the agreement to be submitted on stamp paper worth Rs. 100 duly signed and notarized by the Notary Public, to release the 1st Installment of HEC component as mentioned above.

The following documents may also be provided along with the duly signed and stamped agreement well before the due **date**:

- Attested CNIC copies of PI and Co PI
- Attested CNIC copy of Industrial Partner
- Two copies of the finalized proposal (including revision in budget if suggested by HEC)
- Agreement dully signed by industrial partner and Vice Chancellor/Rector.

Best Regards,

Ghulam Sarwar
PFC TDF (R&D)

CC: _____
Detailed Budget Breakup (Approved)

DESCRIPTION	YEAR 1		YEAR 2		Total Amount	
	HEC	Industry	HEC	Industry	HEC	Industry
A. Salaries and Honorarium						
PI: One month/year of basic salary @						
Co-PI: One month basic salary for the entire duration @						
Patent filing						
Subtotal:						

Prototype Development Cost

B. Permanent Equipment (Please attach invoice/quotation and expected delivery date for items costing over Rs 0.1 Million)						
Subtotal:						

C. **Expendable Supplies**						
Subtotal:						

BUDGET FOR THE PROPOSED RESEARCH PERIOD (RS. IN MILLION)-CONTINUED

DESCRIPTION	YEAR 1		YEAR 2		Total Amount	
	HEC	Industry	HEC	Industry	HEC	Industry
D. Others						
D1. Literature, documentation, information, online literature search, contingencies, postage, etc.						
Subtotal:						

D2. Local Travel (Destination and Purpose)						
Subtotal:						

D3. Miscellaneous						
Audit Fee (Max. Rs 10,000)						
Accountant Fee (Max Rs. 10,000)						
Subtotal:						
Subtotal (D1 + D2 + D3):						

E. Indirect cost (University overheads) 02% of Total direct costs to of the university portion meet office support, utilities, etc.)		Nil		Nil		Nil
==Grand Total (HEC 1st year A + B + C + D + E) vise versa:== ➡ ==Please make sure calculations will be correct.==						
==**Total Budget**==	==HEC:== ==1st +2nd year==		==Industry:== ==1st +2nd year==		==Total:== ==HEC + Industry Components==	

CONTRACT AGREEMENT FOR ACCOMPLISHMENT OF DEVELOPMENT PROJECT UNDER
ESTABLISHMENT OF TECHNOLOGY DEVELOPMENT FUND PROGRAM OF HIGHER EDUCATION COMMISSION

This agreement is made at _____, on this day of _____ month __ year-----between the University (**Name & Address**) --and Higher Education Commission (HEC). HEC has agreed to grant a financial assistance to (PI name and University complete address) for the project titled" _____" subsequently referred to as project.

Now it is mutually agreed as follows:

1.   The financial assistance will be for a total amount of **Rs. _____/-** over a period of two years.

2.   The financial assistance will be given to University (PI) in two installments on yearly basis with the following break-up:

   1st Installment   Rs.   _____/-
   2nd Installment   Rs.   _____/-

3.   Principal Investigator (PI), from University, (**Name + NIC No**.) ------------ ,Co-Principal Investigator (**Co. PI-Name + NIC No.**) from --------- and Industrial Partner from--------- (**Name & Complete Address**) will implement the project.

4.   PI /University to ensure that the Industrial Partner (Name, Address & Organization Name+ address) is a properly registered firm or industry and will play the role as envisaged in the project document/ industrial support letter.

5.   PROJECT DURATION: The project will be taken in hand w.e.f._____ (i.e. June 2017) and shall be completed by or before (month & year) unless extended further by the HEC.

6.   PROJECT IMPLEMENTATION: During the course of the project , the following time-table for the release of funds shall be observed, subject to the availability of funds under TDF:

   • 1st Installment after approval of the development project and completion of all codal formalities.
   • 2nd Installment after submission and approval of 1st year progress report.
   • Final Completion Report & Success Stories will be submitted before termination of the Project.

7.   The account for HEC component shall be operated jointly by the Principal Investigator and Treasurer or Finance Director of the University.

8.   All purchases should be made through a Purchase Committee represented by members nominated by the university as per government rules.

9.   The PI will show the bank documentary evidence of Industrial component contribution (If assured).

10.   Expenditure shall be made only in accordance with budget lines approved by the HEC and communicated to the Principal Investigator at the time of release of funds. For any re-appropriation from one budget line to the other prior approval of the HEC shall be obtained.

11.   The PI shall submit two separate annual physical and properly audited financial progress reports to the HEC.

12.   PI and project team should cooperate positively with HEC TDF project team for the progress reports , flyers, site visit, short documentary and any other requirement to showcase the program success.

13. The HEC may withhold the release of any installment otherwise due, if it is not satisfied with progress report, the statement of accounts or the manner in which expenditure has been incurred.

14. The funds shall be utilized exclusively for the project. No change in the nature of topic, PI arrangement of supervision and the approved technical program of the project shall be made without the written consent of the HEC.

15. The accounts relating to the project shall be available for audit internally by the HEC as well as externally by the Auditor General of Pakistan. The Project Implementing Agency shall produce the relevant record as and when required for this purpose.

16. The machinery, equipment, apparatus and any other non-consumable items purchased out of the funds provided by the HEC shall remain the property of the HEC or with the permission of the HEC, the property will vest with the University where the project is located. The necessary stock entry will be made in the relevant stock register, until and unless decided otherwise by the HEC.

17. Any discovery made, patent, product/process carried out with this grant will be in the name of the PI and the university concerned. Any income accruing therefrom will be shared with HEC @ 2% and the University according to formula to be established by the HEC.Terms of licencing to industry will be decided by the university ORIC.

18. In all publications and reports concerning the project, the support provided by the HEC shall be duly acknowledged.

19. In case of any dispute concerning the interpretation and application of this Agreement, it shall be referred to the Executive Director HEC who or his nominee shall act as sole arbitrator. The resolution rendered by the sole arbitrator shall be final and binding upon the parties.

20. If principal Investigator intends to go abroad, he/she should inform R & D Division of HEC Prior to his/her departure, and may nominate substitute for the period of his/her absence.

21. For any foreign/local travel approved under the project the PI will need to submit Boarding Card, visa fee, ticket invoice with the audited financial report.

22. In witness Whereof Principal Investigator, University and HEC have hereunder set their hands to this agreement on _____ :

PRINCIPAL INVESTIGATOR
Name& NIC#:
Name of HEI:
Designation:
Official Stamp:
Dated:

INDUSTRIAL PARTNER
Name:
Name of Industry/organization/firm:
NIC#:
Designation:
Official Stamp:
Dated:

HIGHER EDUCATION COMMISSION
Name:
NIC#:
Designation:
Official Stamp:
Dated:

HEAD OF UNIVERSITY
Name:
NIC#:
Designation:
Official stamp:
Dated:

Form No. HEC/R&D/TGPR/F-014 A

HIGHER EDUCATION COMMISSION
H-9, ISLAMABAD (PAKISTAN)

Application Form
Travel Grant for Pakistani Researchers (TGPR)
(Paper Presentation)

Eligibility   *(Please tick the appropriate box)*

(1) Faculty members of HEC recognized universities/degree awarding institutions in public and private sector. The 'faculty member' includes:
   i.   Regular teaching faculty (BPS/TTS).
   ii.   Distinguished and meritorious professors.
   iii.   Faculty hired through FFHP of HEC.
   iv.   Faculty hired through IPFP of HEC.
   v.   Faculty hired on contract for at least one year
   vi.   Faculty studying abroad on any scholarship who are under bond with their parent institutions in Pakistan

.

(2) Non-teaching staff of HEC recognized universities/degree awarding institutions in public and private sector. The 'non-teaching staff' should:
   i.   Be a permanent employee of the university/DAI or hired on contract who has served for at least two years in same institution and his/her contract is being extended on annual basis
   ii.   Hold at least a post-graduate degree (MS Equivalent)

(3) MS/M.Phil. leading to Ph.D. or Ph.D. scholars registered with accredited local Universities

(4) Pakistani Ph.D. scholars, studying abroad under HEC or any Government of Pakistan scholarship

1	**APPLICANT'S PROFILE** *(please attach 2-3 page CV with the application form highlighting your research publications in peer reviewed journals)*	
	Name	
	CNIC/Passport No.	
	Highest Qualification	
	Designation	
	Department/Institute	
	University/DAI	
	Correspondence Address	
	Contact Details	Cell: Email:
	In case of scholar enrolled in Ph.D. or M.Phil. leading to Ph.D., please indicate in the Designation as Ph.D. Scholar and also mention the Department and University where you are enrolled.	
2	**DETAILS OF CONFERENCE/SEMINAR/WORKSHOP**	
	Title of the Event (as per Acceptance Letter/Brochure of event)	
	Event Date(s) **(as per Acceptance Letter/Brochure of event)**	
	Venue (City & Country)	
	Organizer of the Event *(name of university/society)*	
	Website address of the event	
	Please attach Event's Brochure containing aims, objectives, themes, organizing committee, scientific committee, keynote speakers and Charges of registration of the event and accommodation etc.	

3	**DETAILS OF PAPER**			
	Title of the Research Paper **(as per acceptance letter)** *(both hard and soft copies of the paper are required)*			
	Mode of Presentation (please tick one) *(Letter of acceptance/invitation should clearly indicate the mode of presentation)*		Oral	Poster
	Has the abstract/paper been reviewed by the technical reviewers? *(Documentary evidence that paper has been peer-reviewed must be attached)*		Yes	No
	Will the abstract/paper be published in Book of Abstracts/Proceedings/Journals of Conference etc.? *(Documentary evidence that abstract/paper will be published as an outcome of the conference)*		Yes	No
	Please note that an email from organizer clarifying the mode of presentation, peer review and publication would also be acceptable.			

4	**FINANCIAL ASSISTANCE PROVIDED BY EVENT ORGANIZERS OR OTHER SPONSORS**		
	Item	**Amount (Rs./US $)**	**Sponsor**
	Travel Cost		
	Registration Fee		
	Accommodation Charges		
	Daily Allowance		
	Any Other		
	Total		

5	**FINANCIAL ASSISTANCE REQUESTED FROM HEC**		
	Item	**Amount (Rs./US$)**	**Documents Required**
	Travel Cost *(Economy class return air fare from origin to destination)*		Quotation from travel agent for the shortest route (optional)
	Registration Fee *(as per actual or maximum of US$ 500 whichever is less)*		Attach documentary evidence (mandatory)
	Accommodation *(for event days plus one day – max. 6 days - @ US$100 per night)*		Attach documentary evidence (optional)
	Daily Allowance *(event days plus one day, maximum of 6 days),*		-
	Total		

6	DETAILS OF PREVIOUSLY AVAILED TRAVEL GRANTS FROM HEC OR OTHERS			
	Date of Event	Country Visited	Name of Funding Agency	Amount of Grant (Rs.)

7	UNDERTAKING BY THE APPLICANT
	I hereby undertake and affirm that: • The substance of the research paper being presented (as indicated above) is based on the original research conducted by me / us. In case any plagiarism is proved, apart from penalties imposed, I will refund entire amount of grant. • The above paper has not been presented/submitted in any other conference/workshop etc. and also has not been published elsewhere. • All the information provided above is true to the best of my knowledge and belief. • If the grant is provided, I shall solely be responsible for its proper utilization. • All the supporting documents submitted are authenticated. SIGNATURES OF THE APPLICANT SIGNATURE & STAMP OF HEAD OF DEPARTMENT (Scholars studying abroad may get verification from their foreign supervisor)

8	VERIFICATION BY THE DIRECTOR (RESEARCH/ORIC/QEC) OR EQUIVALENT
	I hereby undertake and affirm that: • The paper has been checked for Similarity Index using TURNITIN software and the Similarity Index of the paper is ----------------------------. • The student has been admitted to Ph.D. program as per HEC approved criteria (required in case of Ph.D. scholars enrolled in Pakistani universities) (As per HEC policy, papers under consideration must be checked using TURNITIN software for Similarities Index. Please exclude the 'References' while checking the Similarity Index. The maximum limit of Similarity Index in case of 'Quotation' from a single source should not be exceeding 5 %: **A copy of TURNITIN report is required along with Application**.) SIGNATURE & STAMP OF DIRECTOR (RESEARCH/ORIC/QEC) or equivalent (For students enrolled in foreign universities, Similarity Index will be checked by HEC)

9	VERIFICATION BY THE RECTOR/VICE-CHANCELLOR OF INSTITUTION (*)
	I strongly recommend the application and certify that: (*please circle one option*) • the applicant is a bonafide faculty member of the university/DAI • the applicant is a bonafide non-teaching staff member of the university/DAI • the applicant is a bonafide Ph.D. scholar of the University/DAI SIGNATURE OF RECTOR/VICE CHANCELLOR OFFICE STAMP WITH DATE

Check List of Attachments with Application Form

**Please ensure that relevant documents are
attached with the Application Form**

For oral presentation of paper in national/international

Conferences

1.	Letter of Acceptance/Invitation or email from the organizer **_in the name of applicant_**. (if it is not in the name of applicant, please obtain it from the organizer)	Yes	No
2.	Mode of presentation (**_oral/poster_**) has been clearly mentioned (if there is no mention in the letter or email, please obtain such specific email from the organizer)?	Yes	No
3.	Documentary evidence indicating that your abstract/paper has been accepted based upon **_peer-review_** by the technical committee of the event (if there is no mention in the letter or email, please obtain such specific email from the organizer).	Yes	No
4.	Documentary evidence indicating that your **_abstract/paper would be published in Book of Abstracts/Proceedings/Journals_** etc. (if there is no mention in the letter or email, please obtain such specific email from the organizer).	Yes	No
5.	Event's Brochure containing aims, objectives, themes, organizing committee, scientific committee, keynote speakers and Charges of registration of the event and accommodation etc.	Yes	No
6.	Full-text paper to be presented (both hard and soft copies will be required).	Yes	No
7.	In case you are co-author, have you attached NOC from the principal author.	Yes	No
8.	Quotation from the travel agent indicating the shortest route.	Yes	No
9.	Brief CV (2-3 pages) indicating your research publications.	Yes	No
Additional documents required for Poster Presentation			
9..	Have you attached a list of your publications indicating Impact Factor Score (IFS)? (The requisite IFS are 20 in Engineering and Agriculture disciplines, and 30 in Science disciplines. The IFS should also be verified by Director Research/ORIC/QEC/Head of Department/Dean.	Yes	No
Additional documents required from PhD Scholars		Yes	No
10.	Have you attached a copy of scholarship award letter/registration letter from the university in which you are enrolled? Letter must clearly indicate the program in which you are enrolled, i.e. either Ph.D. or M.Phil. leading to Ph.D.	Yes	No
11.	Have you attached a copy of Result Card of GAT (General)/GRE International (Subject)/GAT (Subject) as per HEC minimum criteria for admission in PhD? _(Required from Ph.D. scholars enrolled in local universities)_	Yes	No
12.	Have you attached a list of courses taken at M.Phil. and/or PhD levels with grades obtained._(Required from Ph.D. scholars enrolled in local universities)_	Yes	No
13	Have you attached a list of Ph.D. faculty in your department?	Yes	No
Additional documents required from non-teaching university/DAI's staff			
14.	Have you attached a copy of your job certificate mentioning your designation, department, job description and date of appointment/posting?	Yes	No
15.	Have you attached a copy of MS/M.Phil. Degree? HEC reserves the right to verify the degree.	Yes	No

16.	Have you attached a statement justifying the relevance of the conference and the research paper with your current job description?	Yes	No
Additional documents required from Faculty studying abroad on any scholarship (other than HEC) who are under bond with their parent institutions in Pakistan			
17.	Have you attached a copy of bond signed by you with your parent institution to return and serve Pakistan after completion of your studies?	Yes	No

IMPORTANT

The application must be submitted along with the above documents at least 6 weeks (42 Days) prior to the event date. Early submission of application is encouraged. The documents must be attached in above sequence and must be properly tagged. The application must be in proper (spiral/hard/tape) binding to avoid detachment of any document. INCOMPLETE AND LATE APPLICATIONS WILL NOT BE ENTERTAINED

<u>Signature of Applicant</u>

Form No. HEC/R&D/TGPR/F-014 B

HIGHER EDUCATION COMMISSION
H-9, ISLAMABAD (PAKISTAN)

Application Form
Travel Grant for Pakistani Researchers (TGPR)
(Higher Studies)

<table>
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<td>**1**</td>
<td colspan="4">**APPLICANT'S PROFILE**</td>
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<td>**Name**</td>
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<td>**CNIC No.**</td>
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<td>**Highest Qualification**</td>
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<td>**Designation**</td>
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<td>**Department/ Institute**</td>
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<td>**University**</td>
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<td>**Correspondence Address (In Pakistan)**</td>
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<td rowspan="2">**Contact Details**</td>
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<td colspan="4">In case of fresh candidates/scholars not serving in any organization, please indicate in the Designation as Ph.D. Scholar and omit the Department and University.</td>
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<td>**2**</td>
<td colspan="4">**DETAILS OF PROGRAM**</td>
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<td rowspan="2">**Purpose of Travel** *(Please select the appropriate option)*</td>
<td>To proceed for Ph.D.</td>
<td>To proceed for Post-Doctorate</td>
<td>To proceed under Cultural Exchange Program</td>
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<td>To return after completion of Ph.D.</td>
<td>To return after completion of Post-Doctorate</td>
<td>To return under Cultural Exchange Program</td>
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<td>**Name of the Foreign Country**</td>
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<td>**Duration of Stay Abroad**</td>
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<td>**Tentative Date of Return**</td>
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3	**FINANCIAL ASSISTANCE PROVIDED BY HOST INSTITUTION OR OTHER SPONSORS**		
	Item	Amount (Rs./US $)	Sponsor
	Travel		
	Tuition Fee/Bench Fee		
	Accommodation / Living Allowance		
	Any other		
	Total		

4	**FINANCIAL ASSISTANCE REQUESTED FROM Higher Education Commission**		
	Item	Amount (Rs.)	Documents Required
	Travel Cost *(Economy class one way airfare)*		Quotation from travel agent for the shortest route
	HEC will reimburse the return ticket upon successful completion of the program and upon your return. You need to apply afresh for return ticket.		

5	**JUSTIFICATION FOR REQUEST**

6	**UNDERTAKING BY THE APPLICANT**
	I hereby undertake and affirm that:
	• The information provided above is true to the best of my knowledge and belief.
	• If the grant is provided, I shall solely be responsible for its proper utilization, adjustment with used air ticket and other receipts of expenditure.
	• The supporting documents submitted are authenticated.
	SIGNATURES OF THE APPLICANT (*)SIGNATURE & STAMP OF HEAD OF DEPARTMENT

7	**VERIFICATION BY THE HEAD OF INSTITUTION (*)**
	I strongly recommend the request and certify that: (*please circle one option*)
	• the applicant is a bonafide faculty member of the university
	• the applicant is a bonafide staff member of the university
	SIGNATURE OF THE RECTOR/VICE CHANCELLOR OFFICE STAMP WITH DATE

Check List of Attachments with the Application Form

Please ensure that relevant documents are attached with the Application Form

To proceed for Ph.D.

1.	Unconditional admission letter from Foreign University offering you admission in Ph.D.	Yes	No
2.	Copy of your award letter for scholarship or financial assistance or affidavit about self-finance.	Yes	No
3.	Copy of your highest Degree duly attested by HEC.	Yes	No
4.	Brief CV (2-3 pages).	Yes	No
5.	Quotation from the travel agent indicating the shortest route.	Yes	No
6.	Surety bond of Rs.100/- by two guarantors to be purchased in the name of guarantor(s).	Yes	No
7.	Surety Bond attested by the Oath Commissioner and countersigned by First Class Magistrate.	Yes	No
8.	Copies of CNICs of both Guarantors.	Yes	No
9.	Application form duly signed by the applicant in Section No. 6.	Yes	No
10	Copy of study leave from your employer (required from applicant employed in any organization).	Yes	N.A.
11	Copy of No Objection Certificate (NOC) from your employer (required from applicants employed in any organization).	Yes	N.A.
12	Application form duly signed and stamped by the Head of Department in Section No. 6 (required from applicant employed in any organization).	Yes	N.A.
13	Application form duly signed and stamped by the Rector/Vice-Chancellor of your university in Section No. 7 (required from applicant employed in any organization).	Yes	N.A.

To return after completion of Ph.D.

1.	Unconditional admission letter from Foreign University offering you admission in Ph.D.	Yes	No
2.	Copy of your award letter for scholarship or financial assistance or affidavit about self-finance.	Yes	No
3.	Copy of your Completion Certificate/Provisional Certificate/Ph.D. Degree *(Translated in English)*	Yes	No
4.	Brief CV (2-3 pages).	Yes	No
5.	Invoice of Travel Agent (in Original).	Yes	No
6.	All pages of used Air-Ticket/Electronic Ticket bearing the amount of Airfare (in Original).	Yes	No
7.	All Boarding Passes (in Original).	Yes	No
8.	Justification for not flying with PIA (in case of any other Airline)	Yes	N.A.
9.	Application form duly signed and stamped by the Head of Department in Section No. 6 (required from applicant employed in any organization).	Yes	N.A.
10	Application form duly signed and stamped by the Rector/Vice-Chancellor of your university in Section No. 7 (required from applicant employed in any organization).	Yes	N.A.

To proceed for Post-Doctorate

1.	Letter of placement in an accredited foreign university?	Yes	No
2.	Synopsis/ Brief description of your research proposal?	Yes	No
3.	Brief CV (2-3 pages).	Yes	No
4.	Quotation from the travel agent indicating the shortest route.	Yes	No
5.	Are you under a bond after availing any Scholarship from HEC/Govt. of Pakistan/any other funding agency regarding proceeding abroad?	Yes	No
6.	Copy of study leave from your university.	Yes	No
7.	Copy of No Objection Certificate (NOC) from your university.	Yes	No
8.	Application form duly signed by the applicant in Section No. 6.	Yes	No.

9.	Application form duly signed and stamped by the Head of Department in Section No. 6.	Yes	N.A.
10.	Application form duly signed and stamped by the Rector/Vice-Chancellor of your university in Section No. 7.	Yes	N.A.

To return after completion of Post-Doctorate

1.	Letter of placement in an accredited foreign university?	Yes	No
2.	Completion certificate for Post-Doctoral studies?	Yes	No
3.	Brief CV (2-3 pages).	Yes	No
4.	Invoice of Travel Agent (in Original).	Yes	No
5.	All pages of used Air-Ticket/Electronic Ticket bearing the amount of Airfare (in Original).	Yes	No
6.	All Boarding Passes (in Original).	Yes	No
7.	Justification for not flying with PIA (in case of any other Airline)	Yes	N.A.
8.	Copy of study leave from your university.	Yes	No
9.	Copy of No Objection Certificate (NOC) from your university.	Yes	No
10.	Application form duly signed by the applicant in Section No. 6.	Yes	No
11.	Application form duly signed and stamped by the Head of Department in Section No. 6.	Yes	No

To proceed abroad under Cultural Exchange Program

1.	Letter of nomination by the Government of Pakistan.	Yes	No
2.	Copy of letter of acceptance from the inviting agency/ Institution.	Yes	No
3.	Details of training/visit program.	Yes	No
4.	Brief CV (2-3 pages).	Yes	No
5.	Quotation from the travel agent indicating the shortest route.	Yes	No
6.	Have you attached copy of study leave from your employer (required from applicants employed in any organization)?	Yes	No
7.	Have you attached copy of No Objection Certificate from your employer (required from applicants employed in any organization)?	Yes	No
8.	Has application form been duly signed and stamped by the Head of Department?	Yes	No
9.	Has application form been duly signed and stamped by the Rector/Vice-Chancellor of your university?	Yes	No
10.	Copy of study leave from your employer (required from applicant employed in any organization).	Yes	N.A.
11.	Copy of No Objection Certificate (NOC) from your employer (required from applicants employed in any organization).	Yes	N.A.
12.	Application form duly signed by the applicant in Section No. 6.	Yes	No.
13.	Application form duly signed and stamped by the Head of Department in Section No. 6.	Yes	N.A.
14.	Application form duly signed and stamped by the Rector/Vice-Chancellor of your university in Section No. 7.	Yes	N.A.

Return from abroad under Cultural Exchange Program

1.	Letter of nomination by the Government of Pakistan.	Yes	No
2.	Copy of letter of acceptance from the inviting agency/ Institution.	Yes	No
3.	Details of training/visit program.	Yes	No
4.	Brief CV (2-3 pages).	Yes	No
5.	Invoice of Travel Agent (in Original).	Yes	No
6.	All pages of used Air-Ticket/Electronic Ticket bearing the amount of Airfare (in	Yes	No

	Original).		
7.	All Boarding Passes (in Original).	Yes	No
8.	Justification for not flying with PIA (in case of any other Airline)	Yes	N.A.
9.	Copy of study leave from your employer (required from applicant employed in any organization).	Yes	N.A.
10.	Copy of No Objection Certificate (NOC) from your employer (required from applicants employed in any organization).	Yes	N.A.
11.	Application form duly signed by the applicant in Section No. 6.	Yes	No.
12.	Application form duly signed and stamped by the Head of Department in Section No. 6.	Yes	N.A.
13.	Application form duly signed and stamped by the Rector/Vice-Chancellor of your university in Section No. 7.	Yes	N.A.

IMPORTANT: The Travel Grant applications to proceed or return after completion of higher studies must be received in HEC prior to or within three months of date of travel. Early submission of application is highly encouraged. The documents must be attached in above sequence and must be properly tagged. The application must be in proper (spiral/hard/tape) binding to avoid detachment of any document. INCOMPLETE AND LATE APPLICATIONS WILL NOT BE ENTERTAINED.

Signature of Applicant

Form No. HEC/R&D/NDL/F-015

HIGHER EDUCATION COMMISSION
H-9, ISLAMABAD (PAKISTAN)

Application Form
National Digital Library Program (NDLP)

A. Institution Type Public ☐ Private ☐ R&D ☐ Others ☐ Specify_____	
B. Name of **Institution** _____	
C. Full Postal Address _____	
D. Static IP (CIDR Scheme or Class B,C) (Static IP cannot be changed before one year): _____	
E. Applicant Name _____	
F. Applicant Designation _____	
G. Applicant E-Mail Address _____	
H. Contact Person Name (Institutional Representative for future correspondence with Digital Library: _____	
I. Contact Person E-Mail _____	
J. Postcode _____	
K. Telephone No _____	
L. Fax (If Any) _____	
M. Your Research Preferences _____	

Signature of Applicant

Date_____

HIGHER EDUCATION COMMISSION

H-9, ISLAMABAD (PAKISTAN)

Application Form
National Digital Library Program (NDLP)
Signature with Stamp of the Head of Institution
(Vice-Chancellor/Rector of University
Director of Degree Awarding Institution)

Form No. HEC/R&D/TMWS/F-016 A

HIGHER EDUCATION COMMISSION

H-9, ISLAMABAD (PAKISTAN)

Application Form
Text Book & Monograph Writing Scheme (TMWS)

Please add additional sheets where needed.

1. Category (Monograph or Textbook) : _____

2. Subject: __ _____

3. .Topic/Title: _____

4. .Discipline: _____

5. 'Best suitable For Graduate/Postgraduate (mention one only):   _____

6.. With reference to the curriculum area covered by the monograph/ textbook, give a short summary as regards its use to the graduate and post graduate students of post-graduate colleges, universities and its affiliated departments and institutes.

_____
_____
_____
_____

_____

7. Name of Author _____

8. Designation _____

9 Department _____

10. University/Institution/College _____

_____

Ph: Off._____   **Res.**_____   **Fax:** _____
E-mail:

11**. Co-author**: In case of co-authoring, please mention other associates.

S.#	Name	Designation/Institution	Qualification	Experience

12-Declaration:
I/we hereby undertake that this shall be my/our original work, which has not already been published elsewhere, neither whole nor part of it has been taken from any published source of any other author. Similarity Index must be less than 19% (similarity index certificate must be enclosed).

I/we also declare that while preparing the monograph /textbook, I/we shall abide by the rules and regulations prescribed by HEC, **Outlines on Monograph & Textbook Writing for Universities, Institutes of Higher Education/Research Organizations and Post-graduate College Teachers.**

_____   _____
(Signature of Co-author)   (Signature of Author)

13-The book proposal on monograph/textbook (title)
_____
_____

Is forwarded to the Higher Education Commission as an original work of the author who is a regular employee of the University/College/Institution/Organization
_____
_____
Supports the proposed monograph / textbook and recommends its entertainment under the Textbook/Monograph writing scheme (TMWS).

_____
Signature, name with stamp
(Vice-Chancellor/Rector/President/Head of Institution)

14- For Official Use:

For Official Use only	
File No:	
Receiving Date:	_____ Signature of Head of Program

Proposal Outline for Writing of Text Book/Monograph

1. The main aim of synopsis/text outline is to authenticate the topic of the approved curriculum course and portray its suitability for detailed research under the available conditions. The organizational sequence of the synopsis /text-outline should be as follows:

a)Title Page: The first page should have the exact title of research (field), and subject.
b) Main Text: This should be organized into the following sections:

    i) Abstract: An abstract should very briefly narrate the general features of the proposed study. Please also argue the purpose of the proposed book. How your book will accomplish its purpose?

    ii) Scope: The scope of proposed book may be described as what is included /excluded in the text-matter and why (reasons)?

2- Review of Literature: Please justify the need regarding the topic of research with information regarding research done in the field so far. Only published work should be reviewed, emphasizing that the studies are not a duplication of any previous published work.

3- Relevance with HEC Approved Curriculum: Justification and relevance of the proposed book should also be drawn with regard to the HEC – Approved Curriculum in all prescribed disciplines. The authors should elaborate the relevance of their proposed work to HEC- Curriculum in the desired disciplines/subjects at the respective graduate/postgraduate level and which universities/DAIs are offering such courses across the country.

4- Table of Contents: The tentative list of the table of contents should be provided along with brief summary of each chapter.

5- Two Draft/Sample Chapters: The submission of two-draft chapters is compulsory to ensure the comprehensive peer review process.

6- Research Methodology (especially for Monographs): With special reference to basic and social sciences, the methodology to be followed in the proposed research should be clearly spelled out, giving the study area, probable population, sampling/census techniques and/or experimental design, mode of data collection parameters to be analyzed and possible analytical techniques to be exploited. Relevant reference to the technique followed may be given, as and where needed.

7-Contending Book Titles: This information is very vital for review as authors must provide information in the following sequence:

7.1: Please name what you consider to be the strong three or four competitor book titles available in the market.

7.2: For each contending book title, please provide the following description: Book Title, Author Name, Publisher, Publication Date, Price, Level, Category.

7.3: Please describe that how your proposed book will be different from the contending book titles already available in the market. What are the strengths and weaknesses of your forthcoming work over those available texts?
7.4: Are you aware of any potential contender books that will be published at or around the same time when your book has arrived in the market?

7.5: What gaps you may anticipate to cover by this book in the academic and research field and also market?

08-Target Readership/ Market of the Study: The proposed study should clearly identify the targeted market i-e students, researchers, teachers and other professional organizations and at what level (postgraduate or graduate).

09- Literature /Bibliography: The working bibliography to be provided by the authors.

10- <u>Bio Data Form of the Author and Co-Author</u> (if any), also attached detailed Curriculum Vitae.

11- <u>A paragraph on the kind or type of subject specialist</u>, who can best evaluate the   monograph/textbook. (Do not suggest the name of evaluator).

12- <u>Writers Conditions:</u> Any proposal or condition/s the author/s may like to add.

13. <u>One (01) copy of book proposal</u> (01 hard copy and soft copy, 01 CD)**.**

14- A list of all enclosures.

<u>**Important Instructions:**</u>
1)   HEC accepts only original book titles/proposals for publications as there is no provision for 2nd or revised edition in the Monograph and Textbook Writing Scheme.
2)   Authors are requested to submit book proposals only on the prescribed format along with all necessary information as cited above (S#01 to S#13). After the approval of synopsis the authors may be requested for the submission of full manuscript draft to HEC.
3)   The submission of direct manuscripts for review/publication is not acceptable as authors must process their work for peer-review.
Authors are also not to mention their names or any identification in the synopsis and in two draft chapters.

Form No. HEC/R&D/TMWS/F-016 B

HIGHER EDUCATION COMMISSION
H-9, ISLAMABAD (PAKISTAN)

PLACE RECENT
PHOTOGRAPH

Text Book & Monograph Writing Scheme
BIO-DATA FORM AUTHOR/CO-AUTHOR/S

INSTRUCTIONS
1. USE CAPITAL LETTERS
2. USE EXTRA SHEET WHERE NECESSARY
3. USE SEPARATE FORM FOR AUTHOR AND CO-AUTHOR.

BIO-DATA OF AUTHOR/ CO-AUTHOR:

I. PERSONAL INFORMATION

1. NAME: MR/MS/DR./	2. FATHER NAME:	3. CNIC NO:
4. DESIGNATION & DEPARTMENT:	5. UNIVERSITY/INSTITUTION:	6. CITY

7. PERMANENT ADDRESS:	8. PRESENT ADDRESS:
9. PERSONAL-CONTACTS : A) PHONE NO. B) MOBILE NO.	10) E-MAIL:

II. ACADEMIC BACKGROUND:

LAST DEGREE HELD:

DEGREE HELD	YEAR AWARDED	FIELD OF STUDY	SUBJECT	INSTITUTION

12. PROVIDE DETAIL OF PUBLICATIONS

BOOKS PUBLISHED				RESEARCH ARTICLES PUBLISHED			
Total:	Local	International	In Last 5 Years	Total	Local	International	In Last 5 Years

Details of Books published

Book Name	Name of Publisher	Year of Publication

	162	

Use Additional sheets if required.

13- BY SIGNING BELOW AND SUBMITTING THIS APPLICATION FORM, I------------------------------------ CONFIRM THAT THE INFORMATION I HAVE PROVIDED ABOVE IS TRUE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

SIGNATURE:	DATE:

Use extra sheet where necessary.

HIGHER EDUCATION COMMISSION
Islamabad – Pakistan
Textbook & Monograph Writing Scheme
www.hec.gov.pk
Synopsis Evaluation Form (SEF)

Title of Book:
Category: _____ _____
Discipline: _____
Level of Book: _____ _____

1-   Does the title of the book reflect its contents? ☐ **Yes** ☐ **No**
If "No", what title would you recommend?
....
....

2-   Does the proposed table of contents provide sufficient topical coverage of the subject matter of the book?
☐ **Yes**   ☐ **No**
If "No", what topic (s) should the author (s) add, delete or revise to improve the book's contents? Please elaborate.
....
....
....

3-   a) Is there any singularity in the way the material is presented in the synopsis of proposed book?
☐ **Yes**   ☐ **No**
b) Is any material in the synopsis of proposed book new (not available in other books on the same subject)?
☐ **Yes**   ☐ **No**

4- Are the scientific materials, notation, terminology, and methods presented in the synopsis of proposed book appropriate and you are recommended for book (manuscript) writing?
☐ **Yes**   ☐ **No**

If "No", what are your recommendations?
....
....

5-   How would you rank the academic quality of this proposed topic/field for book writing as compared to other books on the market?
☐ **Excellent**   ☐ **Very Good**   ☐ **Fair**   ☐ **Poor**
Would you please explain the basis of your ranking of the academic quality of this book?
....
....

6-   To give views regarding suitability for postgraduate/graduate students of your discipline, the relevance of content of the synopsis / text outlines to the revised updated curriculum.
....
....
....

7-   How would you rank the clarity with which the author expresses his ideas in the synopsis/ text outlines of the proposed book?

☐ **Excellent** ☐ **Very Good** ☐ **Fair** ☐ **Poor**

Would you please explain the basis of your ranking?

....
....
....

8- **How would you rank the quality and scope the overall presentation?**

☐ **Excellent** ☐ **Very Good** ☐ **Fair** ☐ **Poor**

Would you please explain the basis of your ranking of the quality of presentation?

....
....
....
....

9- **If this proposed book were completed according to your proposed changes and improvements, would you recommend is as a**

a) Textbook
b) Monograph
c) Worthwhile book to have on your shelf?

10- **Should HEC fund this project on this Weightage Score?**
Please tick the relevant box

65 or more...Book Proposal considered RECOMMENDED for Manuscript Writing ☐

55 to 65.......Book Proposal considered RECOMMENDED for Revision & its ☐
          Re-submission to the experts for final review

45 to 55.......Book Proposal considered NOT RECOMMENDED ☐

A- If recommended for manuscript writing, give a brief justification:

....
....

B– If referred back give guidelines for revision:

....
....
....

C- If not recommended for manuscript writing, give reasons:

....
....
....
....

11- **Could you summarize the overall impression of your evaluation of this project?**
12- **Please add any other comments you feel are relevant to your evaluation (Please attach additional sheet/s, if required).**

....
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....

(Please submit the Synopsis Evaluation Form only via e-mail to tmws@hec.gov.pk)

Name of Reviewer_____

Designation_____

 Organization_____

 Cell Number: _____

HIGHER EDUCATION COMMISSION
Islamabad – Pakistan
Monograph & Textbook Writing Scheme
www.hec.gov.pk
Manuscript Evaluation Form

Title of Book: _____

Category: _____

Discipline: _____

Level of Book: _____

1- **Does the title of the book reflect its contents?** ☐ **Yes** ☐ **No**

If "No", what title would you recommend?

....

....

2- **Does the proposed table of contents provide sufficient topical coverage of the subject matter of the book?**

☐ **Yes** ☐ **No**

If "No", what topic (s) should the author (s) add, delete or revise to improve the book's contents? Please elaborate.

....

....

....

3- **a) Is there any singularity in the way the material is presented in this book?**

☐ **Yes** ☐ **No**

b) Is any material in this book new (not available in other books on the same subject)?

☐ **Yes** ☐ **No**

4- **Are the scientific materials, notations, terminologies, and methods presented in this proposed book appropriate and do you recommend the manuscript draft for publication?**

☐ **Yes** ☐ **No**

If "No", what are your recommendations?

....

....

5- **How would you rank the academic quality of this book as compared to other books on the market?**

☐ **Excellent** ☐ **Very Good** ☐ **Fair** ☐ **Poor**

Would you please explain the basis of your ranking of the academic quality of this book?

....

....

....

6- **To give views regarding suitability for postgraduate/graduate students of your discipline, the relevance of contents of the manuscript to the revised updated curriculum.**

....

....

....

7- **How would you rank the clarity with which the author expresses his ideas in the proposed book?**

☐ **Excellent** ☐ **Very Good** ☐ **Fair** ☐ **Poor**

Would you please explain the basis of your ranking?
....
....
....

8-   How would you rank the quality and scope the overall presentation?
☐ Excellent   ☐ Very Good   ☐ Fair   ☐ Poor

Would you please explain the basis of your ranking of the quality of presentation?
....
....
....
....

9- If this proposed book was completed according to your proposed changes and improvements, would you recommend it as a
  a)   **Textbook**
  b)   **Monograph**
  c)   **Worthwhile book to have on your shelf?**
  ☐ a   ☐ b   ☐ c

10-   Should HEC fund this project on this Weightage Score?
<u>Please tick the relevant box</u>

A- Book Proposal considered RECOMMENDED for Publication   ☐

B- Book Proposal considered RECOMMENDED for Revision & its   ☐
         Re-submission to the experts for final review

C- Book Proposal considered NOT RECOMMENDED   ☐

A- If recommended, gives a brief justification:
....
....
....
....
....

B- If referred back give guidelines for revision:
....
....
....
....
....

C- If not recommended gives reasons:
....
....
....
....
....

11-   Could you summarize the overall impression of your evaluation of this project?
....
....
....
....
....

12-   Please add any other comments you feel are relevant to your evaluation (Please attach additional sheet/s, if required).
....

....

Reviewer Name:--

University:--

Address:--

Cell Number:--

HIGHER EDUCATION COMMISSION

H-9, ISLAMABAD (PAKISTAN)

Application Form
PERIDOT Research Program

PERIDOT is the Franco-Pakistani Hubert Curien Partnership (PHC). It is implemented in Pakistan by the Higher Education Commission (HEC) and in France, by the Ministry of Foreign Affairs and International Development (MAEDI) and the Ministry of Higher Education and Research (MESR).

The objective of this program is to develop new scientific and technological cooperation between French and Pakistani higher education institutions/research laboratories by supporting the mobility of researchers.

Priority areas identified for the call of research proposals for 2017 are;
  i.   HEALTH
  ii.   ENERGY
  iii. CLIMATE CHANGE
  iv.   ARCHEOLOGY/HERITAGE
  v.   WATER

ELIGIBILITY CRITERIA

  i.   Active participation and mobility of young researchers, especially doctoral or post-doctoral students (enrolled under supervision by the PI) is one of the primary criteria for selection
  ii.   Applicant must hold a research/faculty position at HEC recognized university/HEI.
  iii. Each project must be submitted with prior official approval and should be duly signed by the head of institution (university, institute etc.)
  iv.   The host institution must guarantee having the needed capacities (e.g. working space) to accommodate the visiting fellows.
  v.   Maximum two research projects can be submitted by the PI for funding.
  vi.   Project life will be for 03 years, and will aim at developing on – going collaborations and to generate new ones.
  vii. Principal Investigator (PI) may visit first and last year of the project, whereas only one student can visit each year. A student can visit once during the project life (enrolled under supervision by the PI).

FUNDING

  o   The funding of the projects will be shared equally by the HEC and French counterpart:
  o   The funding for the core research project will be borne by the concerned Pakistani and the French Universities/Labs/Institutes.
  o   HEC and the French counterpart will provide funding only to bear the travel and living expenses between Pakistan and France for researchers involved in the projects under the Program

  i.   The HEC Pakistan will cover;
       a) Travel expenses of Pakistani Researchers to foreign: round trip including inland travel: @Rs.200,000
       b) Living allowance in Pakistan for Foreign Researchers:
          @Rs.5000 per diem for short stay <= 10 days
          @Rs.3000 per diem for long stay > 10 days up to 3 months

  ii. Contribution by the France will cover;
       a) Travel expenses to their/French Researchers: € 1500 (approx.)
       b) Living allowance in France for Pakistani Researchers:
          @ € 110 per diem for short stay <= 10 days

@ € 65 per diem for long stay > 10 days up to 3 months

- o The funds will be granted on an annual basis, for maximum three consecutive years (till the life of project), according to the approved budget.
- o The renewal of the annual funding is subject to the submission of scientific and financial progress report at the end of each year.

SELECTION

- Applications will be assessed and ranked according to their scientific quality by the ad hoc national mechanisms.
- Active participation and mobility of young researchers, especially doctoral or post-doctoral students is one of the primary criteria for selection.
- The proposals will be reviewed by the experts.
- A joint-committee will proceed to the final selection of projects.

FOCAL POINTS FOR LINKAGES

- In France, Director of International Relations in the concerned universities.
- In Pakistan, Director of Office of Research, Innovation & Commercialization (ORIC), while for non ORIC HEIs: Director Board of Advanced Studies & Research in the universities.

SUBMISSION (How to apply)

- Projects will be submitted on prescribed form.
- Partners will have to submit the same Project in Pakistan and in France at the same time.
- Maximum two research projects can be submitted by the PI for funding.
- CVs of French and Pakistani researchers participating in the project should be attached to the application form.
- Priority fields identified for research projects are; Health, Energy, Climate Change, Archeology and Water.
- Complete application (four sets/copies) should reach the following contacts by the deadline date i.e. **3rd February, 2017.**

Pakistani side: (apply via postal mail)

Ms. Noshaba Awais
Director, R&D Division
Higher Education Commission
Sector H-9 - Islamabad
Email: nawais@hec.gov.pk

French side: (Apply online: www.campusfrance.org/en/node/179751)

Mr. Matthieu Gaulon,
Scientific Attaché, Cooperation and Cultural Section,
Embassy of France in Pakistan
Diplomatic Enclave G-5, PO Box 1068 -Islamabad - PAKISTAN
Email: gaulon.matthieu@gmail.com

PERIDOT RESEARCH PROGRAM 2017

JOINT PROJECT PROPOSAL

- Please provide the required information concisely, yet with enough detail to allow the reviewers to understand your project objectives and work plan. The boxes in Section 3 should be expanded as necessary; however, the combined length of sections 3.a through 3.j should not exceed 10 pages.
- **Please do not forget to attach the one-page curricula vitae of all the participating scientists.**
- **Incomplete proposals and those not submitted using the required forms may not be reviewed.**
- **Please provide 4 copies of the complete application**
-

APPLICATION FORM FOR PERIDOT RESEARCH PROGRAM

Project title

Field and subfield of proposed project

Duration	Starting date

PAKISTAN SIDE			**FRENCH SIDE**		
Name of Principal Investigator			Name of Principal Investigator		
Date	Signature		Date	Signature	
Address			Address		
Telephone	Fax	E-mail	Telephone	Fax	E-mail
Head of Institution/Vice-Chancellor/Rector (Signature and stamp)			Head of Institution/Vice-Chancellor/Rector		

2. Project Summary (Not to Exceed One Page)

Title of the Project:	
Pakistan Side Principal Investigator: Institution:	**French Side** Principal Investigator: Institution:

3. Project Description

3.a Background and Rationale   173
3.b Problem Statement
3.c Prior Experience / Capability
3.d Scope and Objectives
3.e Methods
3.f International Cooperation
3.g Relevance
3.h Results Statement
3.i Additional Benefits

3.j Executive Matters / Budget Requirements

i. Timetable (Please indicate each major step in project evolution referring to the time schedule)

ii. Travel details Principal Investigator (Team leader) may visit first and last year of the project, whereas only one student can visit each year. A student can visit once during the project (enrolled under supervision by the PI). (Please add or remove lines in this table as necessary)

Names/positions of travelers	Schedule and Duration	Objectives	Outcomes

iv. Additional notes (Please provide additional appropriate information, if any)

3.k Budget (For Year 1)

Items requested **Travel + Living allowance**	Pakistan Side		French Side	
	Requested	**Approved**	**Requested**	**Approved**
(name) **XYZ**				
(schedule) e.g. 1st June – 10th June,2017 (10 days)				
(Purpose)				
TOTAL				

Budget (For Year 2, if requested**)**

Items requested **Travel + Living allowance**	Pakistan Side		French Side	
	Requested	**Approved**	**Requested**	**Approved**
(name) **XYZ**				
(schedule) e.g. 1st June – 10th June,2017 (10 days)				
(Purpose)				
TOTAL				

3.k Budget (For Year 3, if requested**)**

Items requested Travel + Living allowance	Pakistan Side		French Side	
	Requested	Approved	Requested	Approved
(name) **XYZ**				
(schedule) e.g. 1st June – 10th June, 2017 (10 days)				
(Purpose)				
TOTAL				

Budget (TOTAL REQUESTED for all years of project)

Items requested Travel + Living allowance	Pakistan Side		Foreign Side	
	Requested	Approved	Requested	Approved
Year 1				
Year 2				
Year 3				
TOTAL				

OTHER FUNDING. Please list the source and amount of any other funds received or applied for to support this project:

3.l Curricula Vitae (Please attach brief CVs—1 or 2 pages each—for all Pakistani and Foreign participants. Please do not include lengthy publications lists or copies of publications.)

PROPOSAL CHECKLIST

Please review your proposal carefully before submitting it to ensure that you have all the following components. Incomplete proposals may not be reviewed. Please submit this completed checklist along with your proposal.

☐ **The combined length of sections 3.a through 3.j does not exceed 10 pages.** (Although proposals exceeding this page limit are not permitted, proposals in which sections 3.a through 3.j are extremely brief—only one or two pages in total—are also highly unlikely to be successful.)

☐ **Budget forms are included for each year of the proposed project, as** well as the cumulative budget showing the total amounts requested over the entire project.

☐ **Brief curricula vitae are attached for all project participants.** (CVs should be brief—one or two pages)

☐ **Provide 4 sets (copies) of the complete application**

The application (4 sets/copies) completed in all respect should reach via postal mail at the following contact;

Ms. Noshaba Awais
Director, R&D Division
Higher Education Commission
Sector H-9 – Islamabad
Email: nawais@hec.gov.pk

Form No. HEC/R&D/PAKUSTP/F-018

CONTRACT FOR FINANCIAL ASSISTANCE UNDER PAK-US Science & Technology Cooperation Program

Whereas the Higher Education Commission, subsequently referred to as the "Commission" has agreed to grant a financial assistance to--------------------------, ---subsequently referred to at the 'Party' for the project entitled "------------------------------------" subsequently referred to as the 'Project'.

Now it is mutually agreed as follows:

1. The financial Assistance will be for a total amount of -------------------- /- spread over a period of three years. The yearly detail of assistance is as:

SN	Project Year	Financial Assistance (Rs.)
1		
2		
3		
	Total	

2. Progress report with an expenditure statement (3 copies) will be submitted by the Party to the Commission in accordance with the instructions issued by the Commission to the Party from time to time.

3. The Commission shall have the right to evaluate the progress of research/ investigation/work done by the party through an evaluation Committee to be appointed by the Commission for this purpose. This evaluation will include on-site inspections also.

4. The grant received by the Party from the Commission will be exclusively utilized for the project and the party will submit an audited statement of expenditure along with the annual progress report.

5. The expenditure incurred from the grant will also be subject to periodical audit by the Commission and the Party shall produce the books of accounts to the persons(s) appointed for this purpose by the Commission.

6. All purchases will be made as per prescribed rules of the Government/University where the project is located.

7. Machines, equipment, apparatus or any other item purchased out of the grant given by the Commission will remain the property of the Commission, or with the permission of the Commission, the University where the project is located.

8. Any discovery made, patent and/or license obtained based on the research carried out with this grant will be in the name of the Commission and any income accruing there from, will be shared by the Commission and the Party according to a formula to be established by the Commission.

9. The party shall spend funds strictly in accordance with the approved plan. Any deviation in this regard shall require the prior approval of the Commission.

10. No change in the arrangement for supervision/ execution of the project or in the approved technical programme will be made without the written consent of the Commission.

11. In all publications and reports concerning the project, the support provided by the Commission will be duly acknowledged.

12. The project funds shall be maintained in a separate account to be operated jointly by the Party & Treasurer/Accounts Officer (in case of Centers).

13. The party shall carry out necessary revisions/amendments as suggested by evaluator(s) before execution of the projects.

14. The Commission will not allow transfer of project from the institution from where it is initiated to any other institution.

15. Extension in the duration of the research project may be taken subject to the provision of proper plan of activities left with complete justifications and clarifications and approval from competent authority of HEC.

16. It will be the joint responsibility of the Party and the University, where the project is located, to execute and complete the project within stipulated time and financial assistance.

17. If the Party fails to complete the project within stipulated period, or the Party abandoned the project activities without any justified reason, the Commission has the right to recover the funds in full or in partial as may be decided by the Commission.

In witness hereof, I/we _____ put my/our signature(s) here below on the _____ day of _____.

Signature   Signature of the Party
Higher Education Commission
                                            Name   _____

                                            1 Designation   _____

                                            Dated: _____

                        2 Signature of the Vice-Chancellor / Institutional Head / Official Stamp

                        Dated   _____

<u>Pakistan-U.S. Science and Technology Cooperation Program</u>
<u>Annual Report Form</u>

Reports should be prepared jointly by the Pakistani and U.S. principal investigators and should cover all project-related activities carried out during the reporting period on both sides. Please expand the boxes below to accommodate all the information you need to include.

Project Title:	
Pakistani Principal Investigator:	**U.S. Principal Investigator:**
Reporting Period:	

Summary of Activities During Reporting Period: Please describe what has been accomplished under your grant during the reporting period, outlining the activities that were undertaken and specifically discussing achievements in relation to the milestones or targets set in the original work plan. For project-related events such as workshops, conferences, exchange visits, etc., please be sure to include exact dates and locations.

Educational Impacts: Please provide information on the numbers of students and other junior collaborators (graduate and undergraduate students, healthcare workers, laboratory technicians, data collectors, etc.) involved in the projects, and discuss new courses or degree programs created (if any) or changes to existing course curricula as a result of your project.

Infrastructure Development: Please list any equipment acquired during this reporting period with grant funds and discuss the impact the new equipment will have on research and educational activities.

Publications: Please provide citations for any papers published or conference presentations made as a result of your project.

Additional Funding: Please list any additional funding applied for or received to help support your project during this reporting period.

Linkages with Government or Private Industry: Please describe any linkages developed with government agencies or companies interested in implementing the results of your project.

Problems Encountered: Please provide information on any problems you may have encountered in making progress on your project objectives and describe steps you are taking to resolve the problems.

Plans for Activities During the Coming Year: Please provide details on project activities during the next year, including planned exchange visits, training events, and ongoing research efforts.

Supplementary Information: If applicable, please attach copies of project-related workshop or conference agendas, course curricula developed, summaries of research data collected in the course of the project, or articles about the project appearing in newspapers, journals, or Web sites. **Please note that your report will be posted on the program Web site, so please do not include any data you do not wish to make publicly available at this point in your research.**

Indicators	Reporting Period:
1. Number of higher education partnerships between Pakistani and U.S. institutions (see note below)	
2. Number of journal articles, technical reports, books, or book chapters (published or accepted for publication) resulting from your project during the reporting period	
3. Number conference presentations resulting from your project during the reporting period	
4. Number of training events (courses, workshops, seminars, conferences, stakeholders' meetings) conducted on your project during the reporting period	
5. Total number of Pakistanis making exchange visits on your project during the reporting period	
Number of women	
Number of men	
6. Total number of Americans making exchange visits on your project during the reporting period	
Number of women	
Number of men	
7. Total number of exchange visits overall during the reporting period	
8. Total number of Pakistani PhD students involved in the project	
Number of women	
Number of men	
9. Total number of American PhD students involved in the project	
Number of women	
Number of men	
10. Total number of all other Pakistanis not listed above who participated in your project during the reporting period (Include in this total those who were involved as researchers, MS or undergraduate students, technicians, or data collectors, as well as those who received formal training in workshops or courses or participated in conferences or stakeholders' meetings organized as part of the project.)	
Number of women	
Number of men	
11. Total number of all other Americans not listed above who participated in your project during the reporting period (Include in this total those who were involved as researchers, MS or undergraduate students, technicians, or data collectors, as well as those who received formal training in workshops or courses or participated in conferences or stakeholders' meetings organized as part of the project.)	
Number of women	
Number of men	

Note on Question 1: For the number of higher education partnerships, please count the partnership between your institution and your Pakistani counterpart's institution as <u>one</u>. If your project also involves collaboration

with other Pakistani institutions / US institutions (universities, research institutes, government agencies, or non-governmental organizations), please add each such additional institution to your total.

Pakistan-U.S. Science and Technology Cooperation Program Completion Report Form

Reports should be prepared jointly by the Pakistani and U.S. principal investigators and should cover all project-related activities carried out during the reporting period on both sides. Please expand the boxes below to accommodate all the information you need to include.

Project Title:

Pakistani Principal Investigator:	U.S. Principal Investigator:
Reporting Period:	

Summary of Activities During Reporting Period: Please describe what has been accomplished under your grant during the reporting period, outlining the activities that were undertaken and specifically discussing achievements in relation to the milestones or targets set in the original work plan. For project-related events such as workshops, conferences, exchange visits, etc., please be sure to include exact dates and locations.

Educational Impacts: Please provide information on the numbers of students and other junior collaborators (graduate and undergraduate students, healthcare workers, laboratory technicians, data collectors, etc.) involved in the projects, and discuss new courses or degree programs created (if any) or changes to existing course curricula as a result of your project.

Infrastructure Development: Please list any equipment acquired during this reporting period with grant funds and discuss the impact the new equipment will have on research and educational activities.

Publications: Please provide citations for any papers published or conference presentations made as a result of your project.

Additional Funding: Please list any additional funding applied for or received to help support your project during this reporting period.

Linkages with Government or Private Industry: Please describe any linkages developed with government agencies or companies interested in implementing the results of your project.

Problems Encountered: Please provide information on any problems you may have encountered in making progress on your project objectives and describe steps you are taking to resolve the problems.

Plans for Activities During the Coming Year: Please provide details on project activities during the next year, including planned exchange visits, training events, and ongoing research efforts.

<table>
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Supplementary Information: If applicable, please attach copies of project-related workshop or conference agendas, course curricula developed, summaries of research data collected in the course of the project, or articles about the project appearing in newspapers, journals, or Web sites. **Please note that your report will be posted on the program Web site, so please do not include any data you do not wish to make publicly available at this point in your research.**

Indicators	Reporting Period:
1. Number of higher education partnerships between Pakistani and U.S. institutions (see note below)	
2. Number of journal articles, technical reports, books, or book chapters (published or accepted for publication) resulting from your project during the reporting period	
3. Number conference presentations resulting from your project during the reporting period	
4. Number of training events (courses, workshops, seminars, conferences, stakeholders' meetings) conducted on your project during the reporting period	
5. Total number of Pakistanis making exchange visits on your project during the reporting period	
Number of women	
Number of men	
6. Total number of Americans making exchange visits on your project during the reporting period	
Number of women	
Number of men	
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8. Total number of Pakistani PhD students involved in the project	
Number of women	
Number of men	
9. Total number of American PhD students involved in the project	
Number of women	
Number of men	
10. Total number of all other Pakistanis not listed above who participated in your project during the reporting period (Include in this total those who were involved as researchers, MS or undergraduate students, technicians, or data collectors, as well as those who received formal training in workshops or courses or participated in conferences or stakeholders' meetings organized as part of the project.)	
Number of women	
Number of men	
11. Total number of all other Americans not listed above who participated in your project during the reporting period (Include in this total those who were involved as researchers, MS or undergraduate students, technicians, or data collectors, as well as those who received formal training in workshops or courses or participated in conferences or stakeholders'	

meetings organized as part of the project.)	
Number of women	
Number of men	

Note on Question 1: For the number of higher education partnerships, please count the partnership between your institution and your Pakistani counterpart's institution as <u>one</u>. If your project also involves collaboration with other Pakistani institutions / US institutions (universities, research institutes, government agencies, or non-governmental organizations), please add each such additional institution to your total.

PROGRESS REPORT EVALUATION FORM
PAK-US SCIENCE AND TECHNOLOGY COOPERATION PROGRAM

Date -------------

Title of the project:

PI's Name:

University & Department:

Physical Progress of the Activities:

1. Good------------   2. Satisfactory--------------   3. Not Satisfactory--------------

Comments on the progress:

Please attach extra sheet if necessary.

Funds Utilization Report:
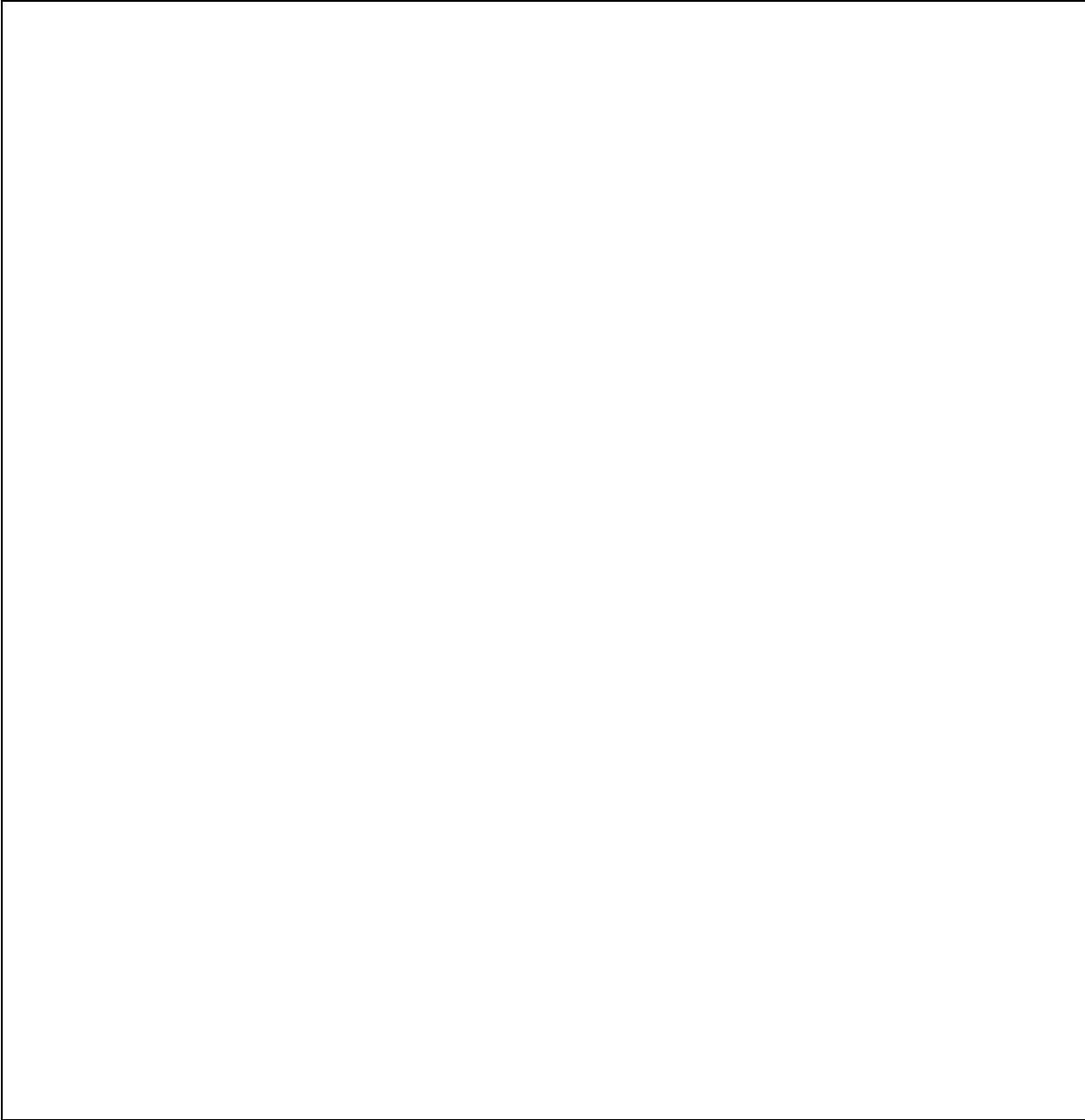
1. Good------------   2. Satisfactory--------------   3.Not Satisfactory--------------

Comments on the progress:

                                                  Please attach extra sheet if necessary.

The Progress report has been reviewed by:

Signature:

University, Department & Designation:

Address:

REVIEW RATING INSTRUCTIONS AND FORM
Pakistan – U.S. Science and Technology Cooperation Program
Phase 7: 2017

A summary of your comments will be released to the applicants upon request, but your identity and affiliation will remain confidential.

Reviewer Id #:   **Date:**

Proposal Id#:

Proposal Title:

U.S. PI: **Pakistani PI:**

Score	Max	
_____	25	**A.** Relevance to Program Objectives
_____	25	**B.** Scientific and Technical Merit
_____	20	**C.** Capabilities of Partner Institutions and Individuals
_____	20	**D.** Nature of Collaboration
_____	10	**E.** Cost Effectiveness of Project
_____		***Sub-Total***
_____	*10*	*Commercialization, Technology Transfer, and Industry Linkages (bonus points)*
_____		**Total**

If we are unable to fund the proposal during this cycle, what would your recommendation to the PIs be?

Proposal should be revised and resubmitted to a future round.
Proposal is weak or inappropriate; do not recommend grant award or resubmission.

A. RELEVANCE TO PROGRAM OBJECTIVES *(25 points max)***:** Please rate the extent to which the proposed project furthers one or more of the following objectives: (1) Improving the quality, relevance, or capacity of education and research at Pakistani institutions of higher education in science and technical fields; (2) increasing the capacity of science and technology to improve the well-being of the Pakistani people, including (but not limited to) such topics as basic education, health, health security, nutrition, water/sanitation, environment, and economic development; 3) improving the capacity of Pakistani institutions to support industry competitiveness through public/private partnership and entrepreneurship.
Note: Projects deemed not relevant to any of the program objectives will be ineligible for support and need not be evaluated further.

Highly Relevant   _____

Marginally Relevant   _____

Not Relevant   _____

Comments:

B. SCIENTIFIC AND TECHNICAL MERIT *(25 points max)*: Please consider (1) scientific importance, clarity, and specificity of the proposed project; 2) technical feasibility of carrying out project in proposed time frame and likelihood of achieving objectives and 3) compliance with environmental, human subject, animal study, or chemical hazards protocols as applicable

Strengths:

Limitations:

C. CAPABILITIES OF PARTNER INSTITUTIONS AND INDIVIDUALS *(20 points max)*: Please consider (1) professional background and achievements to date, including significance of publications; (2) demonstrated ability to carry out proposed project based on past activities; (3) recognition from peers, professional societies, and other institutions; and (4) potential for future scientific achievements and/or commercialization.

Strengths:

Limitations:

D. NATURE OF COLLABORATION *(20 points max)*: Please comment on (1) expected benefits to the Pakistani and U.S. participants and their institutions; (2) prospects for long-term collaboration following the completion of the current project; (3) appropriateness of match between the expertise and backgrounds of the participants; and (4) demonstrated commitment of the proposing partners to ensuring the participation of women in the project.

Strengths:

Limitations:

E. COST EFFECTIVENESS OF PROJECT *(10 points max)***:**   Please comment on the appropriateness of the proposed budget, including recommendations on increasing or decreasing specific budget items, if necessary.

Strengths:

Limitations:

F. COMMERCIAL VIABILITY AND TECHNOLOGY *(10 bonus points max)*: Please comment on following items: (1) the type and strength of patent claims, (2) significance of market need and opportunity , (3) is there a clear path to a commercially viable product or technology transfer, (4) probability of attracting additional funding from other sources (industry, government, investors, etc.).

Strengths:

Limitations:

_____

Form No. HEC/R&D/PT-MGP/F-022

HIGHER EDUCATION COMMISSION
H-9, ISLAMABAD (PAKISTAN)

Application Form
Pak-Turk Researchers' Mobility Grant

- Please provide the required information concisely, yet with enough detail to allow the reviewers to understand your project objectives and work plan. The boxes in Section 3 should be expanded as necessary; however, the combined length of sections 3.a through 3.j should not exceed 10 pages.
- **Please do not forget to attach the one-page curricula vitae of all the participating scientists.**
- **Incomplete proposals and those not submitted using the required forms may not be reviewed.**
- **Please provide 4 copies of the complete application**

PROJECT TITLE
Field and subfield of proposed project

Duration	Starting date

PAKISTAN SIDE	TURKEY SIDE
Name of Principal Investigator	Name of Principal Investigator
Date — Signature	Date — Signature
Address	Address
Telephone — Fax — E-mail — CNIC No.	Telephone — Fax — E-mail
Head of Institution/Vice-Chancellor/Rector (Signature and stamp)	Head of Institution/Vice-Chancellor/Rector

2. Project Summary (Not to Exceed One Page)

Title of the Project:

Pakistan Side	Turkey Side
Principal Investigator: Institution:	Principal Investigator: Institution:

3. Project Description

3.a Background and Rationale
198
3.b Problem Statement
3.c Prior Experience / Capability
3.d Scope and Objectives
3.e Methods
3.f International Cooperation
3.g Relevance
3.h Results Statement
3.i Additional Benefits

3.j Executive Matters / Budget Requirements

i. Timetable (Please indicate each major step in project evolution referring to the time schedule)

ii. Travel details **Note: Principal Investigator (Team leader) may visit first and last year of the project, whereas only one student can visit each year. A student can visit once during the project (enrolled under supervision by the PI in the same university).**

Visits	How many times?	How long?
Graduate Students	1 max / per year	1 semester min. / 2 semesters max.
Academics	1 max / per year	15 days min. / 3 months max.

(Please add or remove lines in this table as necessary)

Names/positions of travelers	Schedule and Duration	Objectives	Outcomes

iv. Additional notes (Please provide additional appropriate information, if any)

3.k Budget (For Year 1)

Items requested	Pakistan Side		Turkey Side	
Travel + Living allowance	**Requested**	**Approved**	**Requested**	**Approved**
(name) **XYZ**				
(schedule) e.g. 1st June – 10th June,2017 (10 days)				
(Purpose)				
TOTAL				

Budget (For Year 2, if requested**)**

Items requested	Pakistan Side		Turkey Side	
Travel + Living allowance	**Requested**	**Approved**	**Requested**	**Approved**
(name) **XYZ**				
(schedule) e.g. 1st June – 10th June,2017 (10 days)				
(Purpose)				
TOTAL				

3.k Budget (For Year 3, if requested**)**

Items requested Travel + Living allowance	Pakistan Side		Turkey Side	
	Requested	Approved	Requested	Approved
(name) **XYZ**				
(schedule) e.g. 1st June – 10th June, 2017 (10 days)				
(Purpose)				
TOTAL				

Budget (TOTAL REQUESTED for all years of project)

Items requested Travel + Living allowance	Pakistan Side		Turkey Side	
	Requested	Approved	Requested	Approved
Year 1				
Year 2				
Year 3				
TOTAL				

OTHER FUNDING. Please list the source and amount of any other funds received or applied for to support this project:

3.l Curricula Vitae (Please attach brief CVs—1 or 2 pages each—for all Pakistani and Foreign participants. Please do not include lengthy publications lists or copies of publications.)

PROPOSAL CHECKLIST

Please review your proposal carefully before submitting it to ensure that you have all the following components. Incomplete proposals may not be reviewed. Please submit this completed checklist along with your proposal.

☐ **The combined length of sections 3.a through 3.j does not exceed 10 pages.** (Although proposals exceeding this page limit are not permitted, proposals in which sections 3.a through 3.j are extremely brief—only one or two pages in total—are also highly unlikely to be successful.)

☐ **Budget forms are included for each year of the proposed project, as** well as the cumulative budget showing the total amounts requested over the entire project.

☐ **Brief curricula vitae are attached for all project participants.** (CVs should be brief—one or two pages)

☐ **Provide 4 sets (copies) of the complete application**

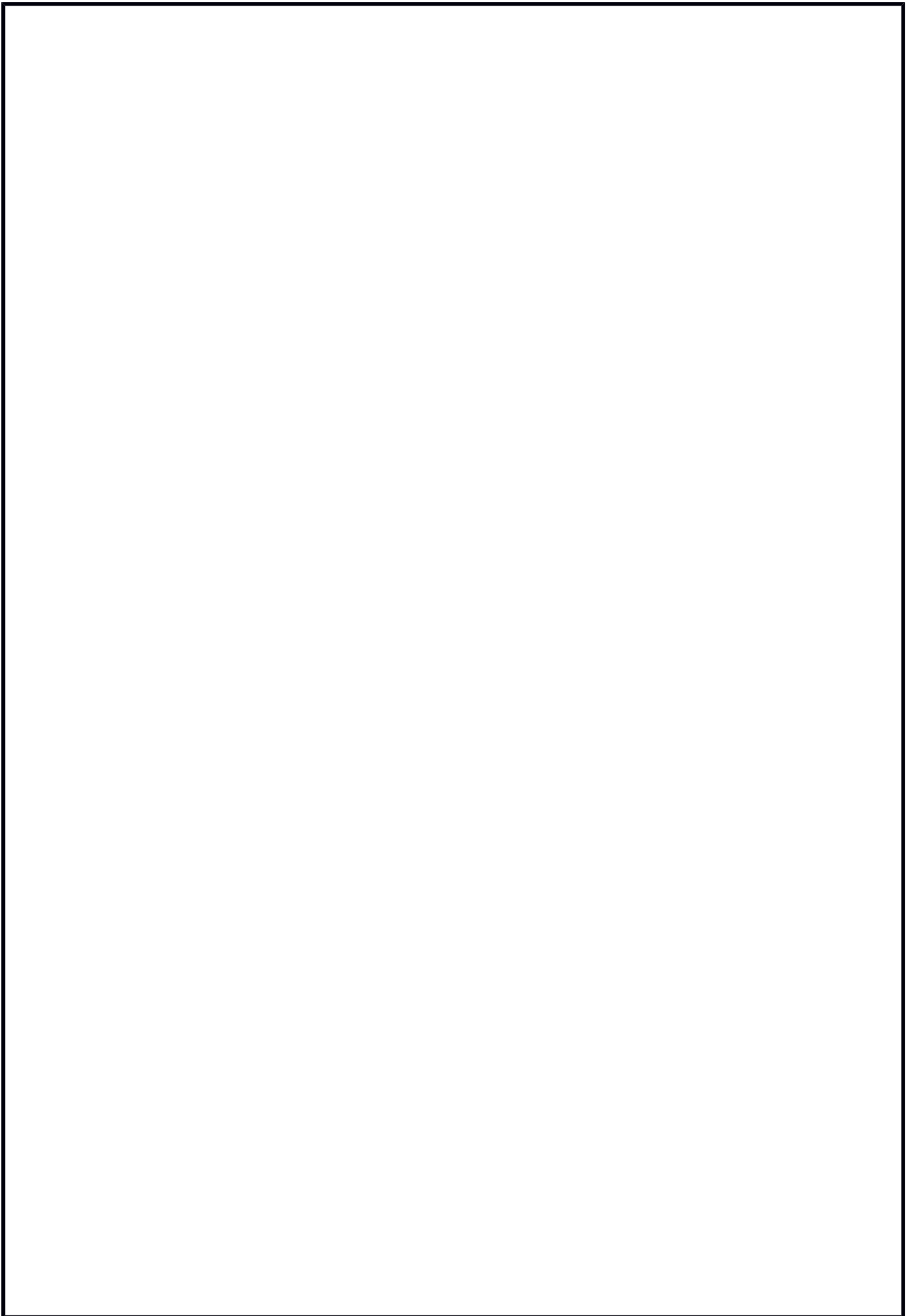# National Research Program for Universities (NRPU)

Start-Up Research Grant Program (SRGP)

University-Industry Technology Support Program (UITSP)

Grant for Organizing Seminars, Conferences, Symposiums and Workshops

HEC Outstanding Research Awards

(ORA)

Access to Scientific Instrumentation Program (ASIP)

Grant for Repair and Maintenance of Scientific Equipment (MSE)

Patent Filing Support Program (PFSP)

Establishment of 'Offices of Research, Innovation and Commercialization (ORICs)

Establishment of Business Incubation Centers (BICs)

Pakistan Program for Collaborative Research (PPCR)

Social Integration Outreach Program (SIOP)

Establishment of Technology Development Fund

Travel Grant for Pakistani Researchers (TGPR)

National Digital Library Program (NDLP)

Text Book & Monograph Writing Scheme (TMWS)

PAK-FRANCE Research Program

(PERIDOT)

PAK – US   Science and Technology Program (STP)

Technology- Based Economic Development Program Funded by: Commercial Law Development Program (CLDP) USA

PAK-UK Researchers Link Program (RLP)

PAK-UK Knowledge Economy Partnership Program (KEP)

Pak-Turk Researchers' Mobility Grant Program (PT-MGP)