



NATIONAL RESEARCH PROGRAM FOR UNIVERSITIES

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.

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| Purpose and Nature | <ul style="list-style-type: none"> – 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 | <ul style="list-style-type: none"> – The Research Grants Program provides support for research projects in all disciplines of Science, Engineering and Technology, Social Sciences, and Humanities. |
| Duration | <ul style="list-style-type: none"> – 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 | <ul style="list-style-type: none"> – The applicant (Principal Investigator, PI) should be a full time faculty member of a university. He/she should have an advanced academic degree and relevant research experience. |
| Approval Procedure | <ul style="list-style-type: none"> – HEC has designated focal points 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 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. |

| <p style="text-align: center;">Agreement</p> | <ul style="list-style-type: none"> — 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 property 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. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|-------|------------------|----|-----------|------------------------------------|----|---|------------------------------------|----|-------------|--|----|--|---|----|-----------------------|-----------------------------|----|-----------------------|-------------------------------|----|---|--|--|---|---------------------------------|----|--|---|----|---------------------------------|---------------------|-----|--------------------------|---------------------|
| <p style="text-align: center;">Annual Report</p> | <ul style="list-style-type: none"> — 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p style="text-align: center;">Entitlement</p> | <ul style="list-style-type: none"> — HEC provides funds as per following details: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">SR. #</th> <th style="text-align: center;">ITEMS</th> <th style="text-align: center;">TOTAL ALLOCATION</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1.</td> <td>Equipment</td> <td>As per requirements of the project</td> </tr> <tr> <td style="text-align: center;">2.</td> <td>Chemical/Glassware (with full justification and details of quantity required for the project)</td> <td>As per requirements of the project</td> </tr> <tr> <td style="text-align: center;">3.</td> <td>Accessories</td> <td>As per requirements of the project (with full justification)</td> </tr> <tr> <td style="text-align: center;">4.</td> <td>Journal Publication fee/on line material</td> <td>Rs. 50,000/- per project w.e.f 01-12-10</td> </tr> <tr> <td style="text-align: center;">5.</td> <td>Remuneration to P.Is.</td> <td>One month Basic Pay P/Year.</td> </tr> <tr> <td style="text-align: center;">6.</td> <td>Co-PIs (if justified)</td> <td>One month Basic Pay P/Project</td> </tr> <tr> <td style="text-align: center;">7.</td> <td>(i) Research fellowships (M.S/M.Phil. degree holders)</td> <td>@ 20,000 + 5,000 for each year of experience to maximum 45,000/- per month</td> </tr> <tr> <td></td> <td>(ii) Senior Research Fellowships (PhD degree holders)</td> <td>@ 45,000/pm (w.e.f. 01-12-2010)</td> </tr> <tr> <td style="text-align: center;">8.</td> <td>Studentships (i) MS/M.Phil. students (ii) Ph.D. students</td> <td>@ Rs. 15,000/- per month + Tuition Fee/Dues @ Rs. 20,000/- per month + Tuition Fee/Dues with possibility of 6 months local or abroad scholarship to conduct research studies, as per IRSIP program of HEC. (w.e.f. 01-12-2010)</td> </tr> <tr> <td style="text-align: center;">9.</td> <td>Secretariat Staff (if required)</td> <td>Rs. 18,000 per year</td> </tr> <tr> <td style="text-align: center;">10.</td> <td>Stationary/Contingencies</td> <td>Rs. 10,000 per year</td> </tr> </tbody> </table> | 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 | Rs. 50,000/- per project w.e.f 01-12-10 | 5. | Remuneration to P.Is. | One month Basic Pay P/Year. | 6. | Co-PIs (if justified) | One month Basic Pay P/Project | 7. | (i) Research fellowships (M.S/M.Phil. degree holders) | @ 20,000 + 5,000 for each year of experience to maximum 45,000/- per month | | (ii) Senior Research Fellowships (PhD degree holders) | @ 45,000/pm (w.e.f. 01-12-2010) | 8. | Studentships (i) MS/M.Phil. students (ii) Ph.D. students | @ Rs. 15,000/- per month + Tuition Fee/Dues @ Rs. 20,000/- per month + Tuition Fee/Dues with possibility of 6 months local or abroad scholarship to conduct research studies, as per IRSIP program of HEC. (w.e.f. 01-12-2010) | 9. | Secretariat Staff (if required) | Rs. 18,000 per year | 10. | Stationary/Contingencies | Rs. 10,000 per year |
| 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 5. | Remuneration to P.Is. | One month Basic Pay P/Year. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 9. | Secretariat Staff (if required) | Rs. 18,000 per year | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10. | Stationary/Contingencies | Rs. 10,000 per year | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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| 11. | Audit/Accounts | Rs. 20,000 (maximum) |
| 12. | Other specific requirements | Depending upon the nature of the project |
| 13. | University overhead (i) If ORIC functional as per HEC criteria (ii) Without ORIC | (i) 15% (ii) 2% |

A university teacher can be PI or co-PI in more than one project, however he / she will get only one month's Basic Pay under one of his / her project. This will apply to only HEC funded projects.

| Financial Provision | <p>— HEC provides research grants up to a maximum of Rs. 20 million for one project. The amount to which a researcher is eligible is conditional with his impact factor as per following chart:</p> <p style="text-align: center;">For Physics, Chemistry and Biology</p> <table border="1"> <thead> <tr> <th>Impact Factor</th> <th>Eligible Amount (Rs. Million)</th> </tr> </thead> <tbody> <tr> <td>100 or above</td> <td>20</td> </tr> <tr> <td>50-99</td> <td>17</td> </tr> <tr> <td>20-49</td> <td>15</td> </tr> <tr> <td>10-19</td> <td>12</td> </tr> <tr> <td>0-9</td> <td>10</td> </tr> </tbody> </table> <p style="text-align: center;">For Remaining Disciplines</p> <table border="1"> <thead> <tr> <th>Impact Factor</th> <th>Eligible Amount (Rs. Million)</th> </tr> </thead> <tbody> <tr> <td>50 or above</td> <td>20</td> </tr> <tr> <td>25-49</td> <td>17</td> </tr> <tr> <td>10-24</td> <td>15</td> </tr> <tr> <td>5-9</td> <td>12</td> </tr> <tr> <td>0-4</td> <td>10</td> </tr> </tbody> </table> | Impact Factor | Eligible Amount (Rs. Million) | 100 or above | 20 | 50-99 | 17 | 20-49 | 15 | 10-19 | 12 | 0-9 | 10 | Impact Factor | Eligible Amount (Rs. Million) | 50 or above | 20 | 25-49 | 17 | 10-24 | 15 | 5-9 | 12 | 0-4 | 10 |
|---|---|-------------------------------|-------------------------------|---------------------|-----------|--------------|-----------|--------------|-----------|--------------|-----------|------------|-----------|---------------|-------------------------------|--------------------|-----------|--------------|-----------|--------------|-----------|------------|-----------|------------|-----------|
| | Impact Factor | Eligible Amount (Rs. Million) | | | | | | | | | | | | | | | | | | | | | | | |
| | 100 or above | 20 | | | | | | | | | | | | | | | | | | | | | | | |
| 50-99 | 17 | | | | | | | | | | | | | | | | | | | | | | | | |
| 20-49 | 15 | | | | | | | | | | | | | | | | | | | | | | | | |
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| 0-4 | 10 | | | | | | | | | | | | | | | | | | | | | | | | |
| Procedure to submit the proposal | <p>— Applications should be submitted in English on the ‘Research Grants Form’ which can be downloaded from HEC website. Six hard copies along with a CD of the application form should be sent by registered mail/courier service to HEC. The applicant should allow 3-6 month for review and processing of the case.</p> | | | | | | | | | | | | | | | | | | | | | | | | |
| | <p>— If any ethical recommendations required for a research study should be resolved before research proposal’s submission to HEC and a recommendation letter of the ethical review committee should be provided along with research proposal.</p> | | | | | | | | | | | | | | | | | | | | | | | | |

For further information please contact

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Deputy Director (R&D)
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Sector H-9, Islamabad
Ph: 051-90401916,
Fax: 051-90401902
Email: fdanjum@hec.gov.pk



HIGHER EDUCATION COMMISSION
H-9, Islamabad (Pakistan)

For HEC use only
Proposal
Identification Number

NATIONAL RESEARCH PROGRAM FOR UNIVERSITIES
APPLICATION FORM
COVER SHEET FOR PROPOSAL

| | | |
|---|-----------------------------|---------------------|
| A. TITLE OF PROPOSED PROJECT | | |
| B. WHETHER PROPOSED RESEARCH IS BASIC <input type="checkbox"/> OR APPLIED <input type="checkbox"/> | | |
| C1. RESEARCH DOMAIN <input type="checkbox"/> Sciences <input type="checkbox"/> Engineering & Technology <input type="checkbox"/> Social Sciences <input type="checkbox"/> Humanities | | |
| C2. STATE FIELD OF RESEARCH AND SPECIALIZATION (For example; Major: Chemistry, Specialization: Organic) Major _____ Specialization _____ | | |
| D. PROJECT DIGEST. Describe the proposed research using (about 250) words geared to the non-specialist reader. | | |
| E1. PRINCIPAL INVESTIGATOR NAME (full with no initials) | E2. HIGHEST DEGREE | E3. POSITION/TITLE |
| E4. DEPARTMENT/SECTION | E5. UNIVERSITY/INSTITUTION | E6. MAILING ADDRESS |
| E7. Telephone: (Area code, number and extension) | Fax: (Area code, number) | Email: |

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| F: CO-PRINCIPAL INVESTIGATOR Name & Position Professional Address | | |
| G1. PROPOSED DURATION OF PROJECT: <i>(in months)</i> | G2. PROPOSED STARTING DATE | H. TOTAL FUNDS REQUESTED |
| CERTIFICATES | | |
| <ol style="list-style-type: none"> 1) Certified that the PI is a full time Faculty Member/Foreign Professor/ Eminent Scholar/Eminent Researcher of the University / Degree awarding institutes. 2) Certified that the equipment(s) demanded for the subject project is / are not available in the University / Institute. 3) Certified that the project under reference has not been submitted to any other funding agency including HEC. 4) Certified that No portion of the project has been funded by any other funding agency including HEC in the past. | | |
| SIGNATURE OF PRINCIPAL INVESTIGATOR | | SIGNATURE WITH STAMP THE HEAD OF INSTITUTION (Vice-chancellor/Rector of University, Director of Degree-awarding Institutions) |
| SIGNATURE OF PRINCIPAL INVESTIGATOR Date | ENDOSEMENT OF THE HEAD OF INSTITUTION (Vice-chancellor/Rector of University, Director of Degree-awarding Institutions) Signature & Date Name Title: Address: Phone FAX E-mail | |
| SIGNATURE OF CO-PRINCIPAL INVESTIGATOR Date | | |

PROJECT DETAILS

1. PROJECT SUMMARY

Describe the proposed research using (about 250) words.

2. PROPOSED GOALS/OBJECTIVES (please identify quantifiable goals)

- i. If the proposed research is basic, please identify or postulate scientific hypothesis on which your proposed goal is based.
- ii. If the proposed research is applied, please clearly 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. P.I. is encouraged to make preliminary inquiries with the proposed end user and attach any certificate/ document in support of the proposed research.

HYPOTHESIS/BASIS OF RESEARCH (if basic research)

GOALS/OBJECTIVES (please quantify your objectives in case of Applied research)

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.

IDENTIFY END USER/ BENEFICIARY INDUSTRY (if applied research)

3. INTRODUCTION (not to exceed one page)

The introduction should consist of three paragraphs; the first paragraph should indicate the scientific hypothesis/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 OF THE RESEARCH PROBLEMS TO BE ADDRESSED (Not to exceed two pages)

- i. 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.
- ii. In case of applied research, please also identify the industry in Pakistan, which should benefit from the process/product. Please justify how the proposed research will contribute to the national economy/social sector. Please justify your claim by giving figures of import/export, present market, future trends etc. The principal Investigator is encouraged to discuss the proposed research with the proposed beneficiary and attach supporting documentation.

(PLEASE ATTACH TWO SHEETS ONLY)

4B. RESEARCH PLAN/ METODOLOGY: SCHEDULE/PHASING (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 (of proposed research on teaching/training of manpower, institutional capability building and on local industry)

6. COLLABORATING LABS

In case of collaboration with national/international research group or local industry, please identify clearly the parts of research that will be carried out in the participating laboratories and please identify complimentary and/or justify the need for collaboration) P.I.s are encouraged to find collaborating partners within Pakistan, particularly in less developed areas. Include a letter from Collaborating agency expressing willingness to collaborate.

7. FACILITIES AND FUNDING

7A. Facilities: equipment available for the research project IN THE HOST UNIVERSITY/INSTITUTION

7B. Scientific Personnel

- a. Available
- b. Required*

*Involvement of research students is encouraged.

7C. Other funding available for the proposed studies (if any)

8. 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).

8. PRINCIPAL INVESTIGATOR: continued

- | | |
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| <p>1. Please attach C.V.</p> <p>2. Number of Publications during the last five years & page numbers on the C.V. where these publications are listed</p> <p>3. Number of research projects completed & page number where this information appears</p> | <p>National: __ __ Please see pages _____ of CV</p> <p>International: __ __ Please see pages : _____ of CV</p> <p>Basic: _____ Please see pages _____ of CV</p> <p>Applied: _____ Please see pages _____ of CV</p> |
|--|--|

9A. ESTIMATED BUDGET FOR THE PROPOSED RESEARCH PERIOD

| DESCRIPTION | % of time devoted to Project | YEAR 1 | YEAR 2 | YEAR 3 | Amount (in million Rs.) |
|--|------------------------------|--------|--------|--------|-------------------------|
| A. Salaries and Honorarium | | | | | |
| PI: One month/year of basic pay @ | | | | | |
| Co-PI: One month basic pay for the entire duration @ | | | | | |
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| Subtotal: | | | | | |

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| B. Permanent Equipment (Please attach invoice/quotation and expected delivery date for items costing over Rs. 0.1 million.) | | | | | |
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| Subtotal: | | | | | |

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| C. Expendable supplies (year wise quantity with full justification) | | | | | |
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| Subtotal: | | | | | |

9A. ESTIMATED BUDGET FOR THE PROPOSED RESEARCH PERIOD (continued)

| DESCRIPTION | YEAR 1 | YEAR 2 | YEAR 3 | Amount (in million Rs.) |
|--|--------|--------|--------|-------------------------|
| D. Others | | | | |
| D1. Literature, documentation, information, online literature search, contingencies, postage, etc. | | | | |
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| Subtotal: | | | | |

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| D2. Local Travel (Destination and purpose with full justification) | | | | |
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| Subtotal: | | | | |

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|---|--|--|--|--|
| D3. Six months local or abroad scholarship for Ph.D Students to conduct research studies, as per IRSIP program of HEC | | | | |
| | | | | |
| | | | | |
| | | | | |
| Subtotal: | | | | |

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| D4. Miscellaneous | | | | |
| Audit Fee (Max. Rs 10,000) | | | | |
| Accountant Fee (Max. Rs. 10,000) | | | | |
| Journal publication fee (Max .Rs. 50,000) | | | | |
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| Subtotal: | | | | |
| Subtotal (D1 + D2 + D3+D4): | | | | |

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|--|--|--|--|--|
| E. Indirect cost (University overheads) | | | | |
| (i) 02 % of Total direct cost to meet office support, utilities, etc.(without ORIC) | | | | |
| (ii) 15 % of Total direct cost to meet office support, utilities, etc.(with functional ORIC) | | | | |
| Grand Total (A + B + C + D+E): | | | | |

9B. 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** (With full justification and details of **quantity required** for the project)

D. **Other Costs.** (Travel must be justified.)