



Guidelines for Post-Doctoral Fellowship

1. Introduction

The main objective of Post-Doctoral Fellowship is to encourage and retain young Indian scholars who have completed their Ph.D. and wish to pursue a regular career in teaching and research. They should have a high potential and promise for conducting full time research on specific themes and issues. These studies are expected to contribute to theoretical and conceptual advancement in different disciplines, help to generate field work based empirical data and contribute towards policy making. And it is hoped that this training will provide them a platform to develop as an independent researcher.

2. The broad disciplines of study

Faculty of Engineering

- Specializations:

Computer Science & Engineering (CSE): Wireless Ad hoc Network & computer Networks, Image Processing, Software Engineering, Machine Learning, Artificial Intelligence, Cloud Computing, Cyber Security & ICT

Faculty of Management

- Specializations:

Finance, Organizational Behaviour & HRM, Supply Chain Management, Operations Strategy, Hospitality Areas, International Business & Entrepreneurship

Faculty of Sciences

Chemistry, Biochemistry, Nanotechnology

Photochemistry	Solar Cells and Sensors	Photoactive membranes
Medicinal Chemistry	Bio-organic chemistry	Bio-Inorganic chemistry
Membrane technology	Water treatment	Energy devices
Nanocatalysis	Bio-inorganic Chemistry	Bio-organometallic Chemistry
Heterogeneous catalysis	Hydrogenation dehydrogenation and coupling reaction	Electrochemistry and membrane science
Energy storage	Supercapacitors	2D materials
Biosensors	Nano-optics	Resource recovery
Organic chemistry	Medicinal chemistry	Nanomaterials
OrganometallicCarbene Chemistry	Electrochemical storage device	Main group chemistry
MembraneSupercapacitors	Facets-dependent nanostructures for energy and the environment	Value addition to waste materials for energy and environment
OrganometallicCatalysis	Protein nanoengineering	Designing of nano catalysts
Electrochemical energy conversion	Plant Metobolics	Green chemistry and its applications

Facet Engineering of nanostructures	Biofuels and bio composites	Ionic liquid and its applications
Organic synthesis and nano catalysis	Nano-bioconjugation	Liquid crystals
CO2 conversion: Homo and heterogeneous catalysis	Organic synthesis	Polymer Chemistry
Photocatalysis	Rechargeable batteries	Membranes for water purification
Nanomedicines for cancers and Alzheimer	Electrocatalysis for HER/OER/ORR	Nanozymes for targeted applications
Drug delivery and therapeutics	Task-specific green solvents	

Biotechnology: Agriculture Microbiology, Bioinformatics, Stress Physiology in Plants, Cancer Biology, Ecology & Environmental Science

Computer Science and Information Technology (CSIT): Artificial Intelligence & Machine Learning

Microbiology: Biodegradable polymers in Industrial Microbiology

Physics: Energy storage, Supercapacitors & 2D materials

3. Eligibility

The scholar should be preferably 25-35 years of age as on the last date of application. There shall be an age relaxation of 5 years for SC/ST/ differently abled / Divyangjan candidates (Persons with Determination).

The scholar must possess Ph.D. degree in any of the disciplines at the time of application.

The selected fellow has to work under the guidance of a Professor (not below Associate Professor with sufficient research supervision experience and publications). The supervisor should not be superannuated and must be in regular employment at the time of application and should belong to the institution in the same discipline as that of the applicant. In case of inter- disciplinary proposals, the supervisor should have proven expertise in the area of research proposed by the scholar. The selection of the supervisor is subject to the approval of the University Research Council (URC).

4. How to apply

The candidates shall submit online application which includes the Research Proposal (**Annexure 1**) Research Proposal should be submitted in the given proforma only.

All scholars are required to keep the hard copy of their application and annexures ready, duly forwarded by the competent authorities of the university/institution so that they may submit the required hard copies, on demand, within one week after the completion of screening process. It is being done for the sake of convenience of the applicants so that they get more time for preparing the hard copies.

In case, the hard copy of application is not received within 10 days of asking, the candidature of applicant shall be treated as withdrawn/cancelled.

The Research proposal should be in English. One applicant can submit only one application under Post-Doctoral Fellowship scheme.

Documents required:

- Biodata
- Age proof certificate
- Qualification certificate
- Category certificate
- Undertaking certificate

5. Procedure for the Award

Applications are initially scrutinized by the Expert Committee.

Thereafter Subject Group(s)/Expert Committee(s) will short-list the meritorious proposals from the eligible applications.

The short-listed applicants are then invited for an interaction/presentation before an Expert Committee.

After interaction, the Expert Committee/s makes recommendation for the award.

6. Duration and Value

Post-Doctoral Fellowship is a full time research work.

The duration of the fellowship is strictly for two years. Extension will be granted on the basis of the Review by the Departmental Research Committee (DRC).

Fellowship and Contingency amount will be paid according to university norms

7. Joining & Release of Fellowship

The scholar has to join the fellowship within one month of the date of the award letter by submitting all required documents through the administering institution.

The fellowship will be sanctioned initially for a period of one year, effective from the date of joining Fellowship by the scholar. The renewal of the Fellowship for the subsequent year shall be subject to the receipt of satisfactory Annual Progress Report and statement of account for the entire fellowship released for first year.

The first year fellowship and contingency will be released in two equal installments. The first installment will be released after receiving the bill and the second installment after receiving a satisfactory Six Monthly Progress Report in the prescribed format along with the Statement of Account to be issued by the Institution.

The second year fellowship will be released in three installments. The first installment of six month fellowship along with contingency will be released on receiving a satisfactory **Annual Progress Report preferably along with a copy of one published research paper and Statement of Account.** The second installment of 03 months fellowship along with contingency, will be released on receipt of a satisfactory Progress Report of 18 months in the prescribed format with a copy of published research paper (if not submitted with earlier progress report) along with the Statement of Account. The final instalment of remaining fellowship along with the contingency will be released after receiving the final report (including revised report

based on the Expert comments and finally, the expert's recommendation for accepting the report) along with second research papers and Statement of Accounts with Utilization Certificate. The final installment of fellowship will be released on receipt of the Audited Statement of Accounts with Utilization Certificate.

The accounts and utilization certificate will be signed by the Finance Officer/Registrar/ Principal/Director.

8. Monitoring of Fellowship

Regular monitoring of Fellowship is done on the basis of Six Monthly and Annual Progress Reports in the prescribed format submitted by the scholar. In cases of delayed Progress Reports by over six-months, the scholar will be required to give the justification of the delay on which the final decision shall be taken by the competent authority. The scholar may be asked to furnish an Undertaking specifying the date of final report submission to the Research Committee.

The fellowship may be discontinued if research progress is found unsatisfactory or any rules are violated.

The Research Committee may ask for annual presentation/mid-term appraisal of the research work.

During the course of the fellowship, the scholars are required to publish at **least two research papers** in peer reviewed journals on the theme of the research undertaken.

9. Completion of Fellowship

If a fellow leaves the fellowship within one year, he/she has to submit a detailed progress report of the work done with publications, if any, duly forwarded by the supervisor. However, if a fellow leaves the fellowship after one year, he/she is

compulsorily required to submit a detailed progress report along with an undertaking to complete the study and submit the final report on completion of the duration of fellowship along with two published research papers, duly forwarded by the supervisor and the institution within the duration of fellowship of two years without claiming fellowship of the remaining period. If, a candidate leaves the fellowship without completion, he/she will have to apply to Research Committee for permission and the Research Committee will take the final decision in this regard.

If, as a special case, a scholar remains on leave due to maternity/medical/extra ordinary circumstances (not to exceed six months) duly approved by the Research Committee, the tenure of fellowship will be extended by that period but the total amount of fellowship will not exceed 24 months.

On completion of the fellowship, the scholar should submit the following:

- A book-length final report in a publishable form along-with a Summary of the report (3000-4000 words) and published research papers.
- Two hard copies of final report and five copies each of the Summary and research articles and a soft copy in pen-drive.
- A certificate of settlement of assets and books purchased out of the contingency grant issued by the Institution.
- Plagiarism –Expert Committee gets every report checked for plagiarism and the similarity report is also generated. As a policy we do not accept contents beyond 15 per cent on similarity index will not be accepted.
- Scholars are required to get their final report checked on their own for similarity index and attach a report of the same at the time of submission.

- Scholars may enquire from Research Committee about the software being used by it at any point of time to have greater efficiency.
- A maximum of three months period can be granted for submission of the final report after completion of the fellowship.

10. Conditions applicable for Fellowship

The post-doctoral research work should not be the same as Ph.D. work.

The duration of full time regular fellowship shall be strictly for two years. In no case the fellowship beyond two years will be considered. However, extension for submission of final report may be granted on justified reasons without any additional financial commitment by the University.

The applicants under salary protection should have been in regular service for two years in an academic institution. The institution shall certify that it will maintain their lien on the post during the period of fellowship and allow them to return after the fellowship period.

The contingency grant may be utilized for books, stationery, computer related costs, and the field work expenses related with the research work.

The University reserves all rights to publish the fellowship report funded by it, provided the work is recommended for publication by Expert/Experts. The scholars can get it published themselves only after seeking permission from University.

The scholar shall acknowledge University support in all publications resulting from the research output of the fellowship and should submit a copy of the same to the University.

All fellowships are subject to income tax deductions as per the Government of India rules.

The research proposal/final report of the fellowship cannot be submitted for the award of any University degree/diploma or funding by any other institution.

The fellowship may be transferred from one institution to another on the request of the scholar under special circumstance with University approval, subject to submission of the following documents:

- (1) Satisfactory progress report;
- (2) No objection certificate from both previous and the proposed university/institute;
- (3) Consent letter along with C.V. of the new supervisor;
- (4) Audited statement of account and utilization certificate along with unspent balance, if any.

During the tenure of fellowship, the fellow will be governed by the rules of the administering institution in all matters including drawls of TA/DA, holidays/leave and contingency grant, etc.

The scholar should not have been subjected to any disciplinary/legal action/proceedings/financial penalties in his/her career/ research career.

The final report submitted by the scholar will be considered satisfactory, only after its evaluation by the University.

Books/periodicals/equipment's purchased by the scholar out of the contingency grant should be deposited with the administering

institution and a certificate to this effect may be submitted along with the final report.

Incomplete applications in any respect shall not be considered for fellowship.

Annexure 1

Research Proposal Format

The complete format for research proposal consisting of the following contents/sections is a part of the Application Form, namely, Details of Research Proposal. No research proposal or a section thereof needs to be submitted separately.

In all, the research proposal shall be in about 3,000 words comprising of the following:

Title of the Research Proposal: The research proposal should have a clear, meaningful and confirmed topic reflecting the scope of the study.

Abstract of the proposed research proposal should be given (in about 200 words).

Introduction:The introduction should clearly state the research problem to be investigated in the light of its theoretical and/or empirical context in the relevant area (in about 400 words).

Major Research Works Reviewed:(National and International): Reviews of at least 15 to 20 significant national and international research works related to the proposed theme of research is to be given in this column (in about 300 words).

Identification of Research Gaps:The scholar should summarize the current status of research in the area and major findings, including the researcher's own work in the area. Existing empirical findings may also be discussed. The overview should clearly demonstrate the inadequacies/ gaps in the existing findings or approaches and its relevance (in about 300 words).

Objectives of the Study: The general aim of the study along with the specific objectives to be accomplished, should be clearly stated (in about 100-150 words).

Research Questions or Hypotheses: Given the conceptual framework and the specification of dimension, the specific questions to be answered through the proposed research should be sharply formulated. In case of an explanatory research design, specification of variables and positing of relationship among them through specific hypotheses must be given (in about 150-200 words).

Framework and methods proposed for research: The researcher must describe in detail (a) the scope and coverage of his/her study; and (b) approach and methodology with adequate justification to conduct the research. The details of the methodology may include research design, data to be collected and empirical and analytical methods to be used. The description of the methodology must be clearly linked to the aims of the research and the research questions/hypotheses of the study (in about 300 words).

Innovation/path breaking aspect of the research: Here, the emphasis should be laid to spell out the innovativeness in approach and novel concepts that have been envisaged in the study (in about 200 words).

Proposed outcomes of the Study: A brief note on the proposed plan of publications, during the course of research and after its completion, must be provided, The section should enlist the proposed outputs from the study in terms of publications in the form of research papers / articles in journals, particularly Scopus/ UGC's Care-listed journals, books, monographs, etc.) (in about 150-200 words).

New data to be generated: A note on deficiencies/inadequacies found in the existing data and description of the new data to be generated for the proposed research (in about 100-150 words).

Relevance of the proposed study for policy-making: A concise brief needs to be given on the significant contributions the research work expected to make to the theory and methodology on the subject as well as on policy making (in about 150 words).

Relevance of the proposed study for society: A concise brief needs to be given on the significant contributions the research work expected to make to the society (in about 200 words)

Milestone set for the study for Quarterly Timelines: A quarterly timeline during the fellowship is to be given for timely completion of the fellowship research work. Timelines must be set for each successive quarter and its completion to be followed for timely submission of the final report (in about 100 words).