Department of Earth Sciences, IIT Bombay

Information for IPDF Applicants and their Supervisors (updated 24/11/22)

The Department welcomes applications for Institute Post-Doctoral Fellowships (IPDF) from qualified candidates with a PhD degree in the solid Earth Sciences-allied disciplines. The following information is meant as a useful quide to IPDF applicants and their prospective Supervisors.

Eligibility criteria

IPDF applicants should have already acquired their PhD degree, as shown by a degree/provisional degree certificate from the granting institution. Those who have submitted the PhD thesis, but are yet to present the viva voce, should apply after fulfilling the above requirement. Applicants with a PhD older than three years before the application date are not eligible.

The IPDF is highly competitive: there are only a limited number of IPDF positions in the Department. As a first criterion for scientific merit, applicants must have published a minimum of two research papers in primary, peer-reviewed, SCI-indexed journals with good reputation, including at least one as lead author. Merely fulfilling this criterion does not guarantee selection. Conference abstracts do not qualify.

PhD graduates from this Department and Institute cannot apply, but they may apply after working in other institutions for a minimum of two years. International applicants are encouraged.

Duration and benefits

The period of the IPDF is one year. However, candidates who have communicated at least one research paper to a SCI-listed journal, based on their IPDF work in the first year, will be considered for extension for a second year. Such candidates will submit a research plan for the second year, which will be duly evaluated and recommended by an expert committee. There will be no extension after two years.

The IPDF currently comes with a consolidated salary of INR 65,000/- per month in the 1st year, and INR 68,000/- in the 2nd year. A house rent allowance (HRA) of 24% of the salary is provided; the Institute does not provide accommodation on campus. A contingency grant of INR 15,000/- per year is also provided. IPDFs are entitled to 30 days of earned leave per year, OPD medical treatment, and casual leave as per rules of the Institute.

Before applying

Applicants are advised to view the webpage of the Department (www.geos.iitb.ac.in) to learn about existing facilities and the faculty members and their fields of teaching and research. Every applicant should identify a faculty member in the Department to act as the IPDF Supervisor, and prepare a research proposal in consultation and agreement with this faculty member. The research proposal, typically a few pages long, should describe the background work, objectives, methodology, etc., along with research plans for the first year. The proposal should be scientifically sound, and workable and realistic in terms of the time and facilities available. Any research component requiring visits to, and stays at, other institutions should be small (no more than ~20%).

How to apply

Applications can be made by email to the Head of Department (head.geos@iitb.ac.in) throughout the year, and will be passed on to and processed by the Convener (PDF Selection Committee) as they are received. The application form may be downloaded from the following website: https://www.iitb.ac.in/en/careers/institute-post-doctoral-fellows-recruitment

The IPDF email application must include the following documents, all as PDF files:

- (1) lastname_applicationform
- (2) lastname CV
- (3) lastname_researchproposal
- (4) lastname_publications (single merged PDF file, or separate files lastname_publ1, lastname_publ2...)
- (5) lastname_phdcertificate
- (6) lastname_letters of recommendation 1 and 2 (from PhD Supervisor and internal examiner on official letterhead, single file)

The applicant should email all these files in a *single* email, keeping the total size of attachments < 15 MB (use compression on any large files). Alternatively, the applicant may email a single .zip file, taking care to name the individual files as above. Incomplete applications will not be processed. Please mention "Rolling advertisement" against the date of advertisement in the application form.

The review process

An IPDF application is first evaluated by three subject experts who are faculty members within the Department or the Institute. The Convener (PDF Selection Committee) selects the experts in consultation with the HoD, but proposed Supervisors are welcome to suggest names.

In view of the various commitments of faculty members (teaching, research, administration, conducting examinations, geological-geophysical field work, etc.) and their availability, a submitted application can take from one week to a few weeks to receive initial screening. Applicants and proposed Supervisors are requested to be patient during this process.

In case of temporary unavailability of the Convener (PDF Selection Committee), or in case of an IPDF applicant proposing to work with the Convener, the HoD will assign one of the members of the PDF Selection Committee to handle the review process.

Reviewed research proposals requiring revision are sent back to the applicant by the Convener, copy marked to the Supervisor, along with any specific comments of the experts. Research proposals unanimously approved by the experts (including revised or re-revised proposals) go to the next stage, which is an <u>online seminar</u> by the applicant. The Convener invites the Supervisor to arrange this seminar at a time mutually convenient to all parties concerned. The seminar should include an introduction to the PhD work (~5 minutes) followed by presentation of the proposed IPDF research work (typically 15-20 minutes), followed by questions and answers with the three subject experts. The Supervisor, the Convener (or one or more members of the PDF Selection Committee), and the HoD also attend the online seminar and participate in the question-answer session as appropriate. A typical duration for the whole seminar is 60-75 minutes.

Applicants who pass the online seminar stage as evaluated by the three subject experts are recommended for the IPDF for one year. The Convener prepares a signed official report to the effect, which is signed and forwarded by the HoD to the Dean (Faculty Affairs), IIT Bombay. The applicant is selected on the basis of recommendation of the Standing Committee, chaired by the Director, IIT Bombay, and receives a formal letter of appointment in due course.

The scientific merit of the applicant (as reflected in the quality of existing research publications and performance in the seminar, for example), and the scientific value of the research proposal, as judged by the three subject experts and the IIT Bombay Standing Committee, are the sole basis of selection for the IPDF programme. No correspondence will be entertained from applicants who did not meet these criteria.

After selection: expectations from an IPDF

The IPDF is not meant for writing papers based on one's PhD work. It is meant for carrying out new research with the Supervisor as formulated in the IPDF proposal, on a full-time basis. It is also expected

that an IPDF will carry out most of the research work within the Department and Institute; as noted above the research will not include components that require extensive visits and stays outside IIT Bombay.

Besides their research work, IPDFs may be asked by their Supervisors and the HoD to help with teaching activities including lab courses, and to assist PhD, MTech and MSc students in their research/dissertation projects, besides administrative duties. IPDFs will find such experience of high value in their job searches and future careers.

In case of research proposals involving significant geological-geophysical field work, there is no cap on the number of days spent in the field within reason, provided the other academic activities and duties of the IPDF and the Supervisor (such as teaching theory and lab classes, administrative duties, etc.) are not affected.

Publications resulting from the IPDF research should acknowledge IIT Bombay and the Department of Earth Sciences for the support through the IPDF programme.

Research costs

IPDF applicants and their Supervisors should note that the Department or Institute do not cover the costs of the IPDF research (such as costs of field work, sample analyses within or outside the Institute, external laboratory training, etc.) They should kindly not approach the HoD with requests to meet such expenses from Departmental funds. It is expected that such proposal-specific expenses will be met by the IPDFs and their Supervisors by applying to external funding agencies, or covered from the Supervisors' ongoing research projects, external collaborators' funds, etc.

Total number of IPDFs

The number of IPDF positions in the Department is limited, so noting the resources available within the Department and the Institute and the time involvement for any IPDF Supervisor, it is decided that a faculty member of the Department may act as Supervisor to a maximum of two IPDFs at any given point in time.

This limit places no bar on the number of PDFs supported by external (non-Institute) funding that the same Supervisor may concurrently mentor (e.g., SERB N-PDFs). Aspirants for postdoctoral positions in the Department are therefore encouraged to apply for such external funding; the review process for them is the same as described above for IPDF applicants.

The above information covers most aspects of the IPDF programme in the Department of Earth Sciences. For any query not covered, prospective applicants may please email head.geos@iitb.ac.in or the undersigned.

PDF Selection Committee, Department of Earth Sciences, IIT Bombay

- Prof. Hetu Sheth, Convener (hcsheth@iitb.ac.in)
- Prof. Prabhakar Naraga, Member (prabhakarnaraga@iitb.ac.in)
- Prof. Sudipta Dasgupta, Member (sdasgupta@iitb.ac.in)
- Prof. Bharat Shekar, Member (bshekar@iitb.ac.in)
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