IISER Kolkata Post-doctoral Fellowship (PDF) Programme
Department of Earth Sciences (DES)

Indian Institute of Science Education & Research Kolkata is the first among five IISERs, to have established a Department of Earth Sciences. The department started its journey in 2007, a year after IISER Kolkata was established. The first batch of BS-MS Earth Science Major students graduated in 2012. Please check the department website for further details: http://earth.iiserkol.ac.in/.

The Department is committed to building a community of researchers including students and faculty members. Our goal is to develop a modern center for Earth Science Education and Research in three core areas:

1. Environmental & Ecological studies in modern and ancient systems,
2. Isotope Geochemistry & Biogeochemical studies,
3. Solid Earth studies

Number of positions available:
Maximum 01

Department-specific Eligibility:
At least one publication from the PhD work of the candidate

Departmental Contact:
Email: pdf.des@iiserkol.ac.in

Department-specific Application Format:
Please fill up the form given below and send it to: pdf.des@iiserkol.ac.in

Important Dates:
Last date of submission of application: 25/04/2023
Date of publication of the interview list (tentative): 05/05/2023
Interview date (tentative): 25/05/2023
Date of publication of results: will be informed later

Available Research Areas/projects:

The Department of Earth Sciences is looking for a postdoctoral fellow. Candidates can apply for the research projects which are listed below. Candidates are also encouraged to apply with their own research proposals related to the available research area listed below.

Research Project # 1: Archean crustal evolution and geodynamics

The Research project:

In contrast to the well-understood modern day plate tectonics, the Precambrian geodynamics, especially the Archean geodynamics, is still debated and various models have been proposed. Many of these models are based on numerical simulations and validation of these models based on information preserved in Archean rock record is rather limited. The Archean cratons of Peninsular India, surrounded by cratonic blocks and Paleoproterozoic to Neoproterozoic orogenic belts, is a window to investigate the Archean-Paleoproterozoic crustal evolution and tectonic processes. More importantly, the relatively smaller granulite belts, within the widespread greenschist-amphibolite grade rocks of these cratons, provide a window into the Archean lower crust, enabling us to study the lower crustal processes. The successful candidate will study the petrological and geochemical evolution of certain granulite belts within the Archean craton to decipher the Archean crustal evolution and tectonic processes.

Eligibility Criteria:

Apart from the general eligibility requirements, the applicant should have a strong background in metamorphic petrology, geochemistry and geochronology and have the ability to conduct field work independently.

Research Project # 2: Fractures & Veins: A study on their attributes and roles in accommodating deformation

The Research project:

Rocks deform through different stages of progressive deformation to reach their finite deformed state. Growth of fractures and veins are often associated with various stages of progressive deformation, and may provide critical insights into the deformation path. This project proposes to address the role of such structures toward accommodating deformation and their controlling factors from natural settings.

Eligibility Criteria:

Apart from the existing criteria, the candidate should have experience in independent fieldwork, and preferably experience in fracture modeling.

INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH KOLKATA

Mohanpur – 741246, Nadia, West Bengal, INDIA
Website: www.iiserkol.ac.in

INSTITUTE POSTDOCTORAL FELLOWSHIPS
DEPARTMENT OF EARTH SCIENCES

Department / Centre :	**Department of Earth Sciences (DES)**		
Proposed Faculty Host :			
Name of Applicant :			
Address for Communication:		**Permanent Address :**	
Mobile No. 1		Email 1	
Mobile No. 2		Email 2	

Date of Birth DD MM YYYY			**Nationality**	**Sex** (M/F)	**Category** (GE/ST/SC/OBC/PD)

PhD Programme details:

Title of the Thesis		
Name of the Supervisor		
Name of the Co-supervisor (if any)		
Name of the Institution / University		
Month and year of Submission / Award*	DD MM YYYY	Awarded / Submitted

***** Expected dates in case of PhD degree has not been awarded at the time of applying.

Salient Features of your PhD in 3-5 bullets:

-
-
-

Details of academic record (from Bachelor onwards)

Sl. No.	Degree	Year	Institution/University	Subjects	CGPA/Grade/% of Marks
1.					
2.					
3.					

Details of past employment (After Ph.D. onwards)

Sl. No.	Designation	Organisation	Duration	
			From	To
1.				
2.				
3.				
4.				

Details of Publication (use separate sheet, if required)

Sl. No.	Title, Authors, Journal
1.	
2.	
3.	

Referees (Three (3) Nos)

Sl. No.	Name	Contact Address with email and phone number
1.		
	Email :	Phone :
2.		
	Email :	Phone :
3.		
	Email :	Phone :

Details of the Proposed Proposal (in case of self-identified proposal) OR the Statement of Purpose for the pre-defined research areas/projects listed above (use separate sheet, if required)**:**
*for self-identified project, clearly stated the following within 400 words – Objectives, Methodology, Deliverables

Choice of the Research areas/Project (please see above). For self-identified proposals, please mention your choice of mentor(s) (up to three).

Mentor 1 -
Mentor 2 -
Mentor 3 -

Enclosures (check list √)

- ☐ Application Form
- ☐ Curriculum Vitae
- ☐ List of Publications

Declaration

I hereby declare that all the information provided in the application form is correct to the best of my knowledge and belief. I am aware that providing of incorrect information in the application may lead to cancellation of candidature at any stage.

Place:

Date:

Signature of the applicant

Please send the application along with enclosures, marked **"Application for PDF, Department of Earth Sciences (DES)"** to pdf.des@iiserkol.ac.in.