भारतीय विज्ञान संस्थान Indian Institute of Science बेंगलुरु/ Bangalore - 560 012



Phone: +91-80-2293 2324 / 2323

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E-mail : office.civil@iisc.ac.in
URL : http://civil.iisc.ac.in

Date: 04.06.2024

The Department of Civil engineering at the Indian Institute of Science, Bengaluru invites applications from Indian Nationals only for the following positions purely on temporary contract basis:

- Title of the project: Studies on the Fracture and Damage Behaviour of Cold Joints and Interfaces – Application to Safety Assessment and Development of Repair Materials for Concrete Dams
 - i. Principal Investigator: Prof. J. M. Chandra Kishen
 - ii. Funding Agency: Ministry of Jal Shakti, Government of India (MoJS, Gol)
 - iii. Desirable qualification/experience:
 - SRF: Experience in concrete lab including handling and operation of loading systems sensor monitoring and data acquisition (strains, loads, displacements etc). Familiarity with FE software such as ABAQUS and ATENA to simulate concrete response under various loads.

Sl		Name of the	Number	Essential Qualification	Consolidated
No	0.	Position	of		Emoluments per
			Vacancies		month
	1.	Senior Research	1	M. Tech with two years'	₹ 42000/m +27%
		Fellow		experience or Ph.D.	HRA = 53,340/-
				student	

- Title of the project: Experimental and Analytical Study of Creep, Shrinkage, Thermal Effects and Alkali Silica Reactions in Mass Concrete: Impact on Dams
 - i. Principal Investigator: Prof. Ananth Ramaswamy
 - ii. Funding Agency: Ministry of Jal Shakti, Government of India (MoJS, Gol)
 - iii. Desirable qualification/experience:
 - For RA-III: Experience in concrete lab including handling and operation of loading systems sensor monitoring and data acquisition (strains, loads, displacements etc). Familiarity with FE software such as ABAQUS and COMSOL to simulate concrete response under various loads.

Sl.	Name of the	Number of	Essential Qualification	Consolidated
No.	Position	Vacancies		Emoluments per
				month
1.	Research	1	Ph.D. in Civil Engineering	₹ 67000/m +27%
	Associate-III		with two years' experience	HRA = 85,090/-

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3. <u>Title of the project</u>: Development of low-carbon alternative materials for dam construction and rehabilitation in various climatic conditions

- i. Principal Investigator: Dr. K S Nanjunda Rao, Prof. Ananth Ramaswamy, Dr. Souradeep Gupta from (Centre for Sustainable Technologies, CST)
- ii. Funding Agency: Ministry of Jal Shakti, Government of India (MoJS, Gol)
- iii. Desirable qualification/experience:
 - For SRF: Experimental skills in the development of low-carbon cementitious materials including in-depth understanding of Portland cement hydration, micro and micro-scale behaviours (e.g. strength, durability, permeability, etc.) and experimental techniques (e.g. non-destructive tests, phase composition, microstructural analysis etc.). Knowledge and prior experimental experience in alkaliactivated binders are desired.

Sl.	Name of the	Number	Essential Qualification	Consolidated
No.	Position	of		Emoluments per
		Vacancies		month
1.	Senior	1	M. Tech with two years'	₹ 42000/m +27%
	Research		experience or Ph.D.	HRA = 53,340/-
	Fellow		student	

- 4. **Title of the project:** Dam material characterization and development of innovative construction materials from dam wastes
 - i. Principal Investigator: Prof. Madhavi Latha G
 - ii. Funding Agency: Ministry of Jal Shakti, Government of India (MoJS, Gol)
 - iii. Desirable qualification/experience: Hands-on experience in geotechnical testing, geosynthetic testing, micro-CT scanning of sand, MATLAB coding, 3D printing and Discrete Element Modelling (DEM)

Sl.	Name of the	Number	Essential Qualification	Consolidated
No.	Position	of		Emoluments per
		Vacancies		month
1.	Senior	1	M. Tech with two years'	₹ 42000/m +27%
	Research		experience or Ph.D. student	HRA = 53,340/-
	Fellow			

- 5. <u>Title of the project</u>: Internal Erosion in Earth Dams Strategies for Remediation and Assessment of Existing Infrastructure
 - i. Principal Investigator: Prof. Tejas Gorur Murthy
 - ii. Funding Agency: Ministry of Jal Shakti, Government of India (MoJS, Gol)

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iii. Desirable qualification/experience:

- **For RA -III:** PhD in civil, mechanical, chemical or physics with experience in x-ray computed microtomography, image analysis and flow through porous media. Familiarity with DEM, or other particle techniques is a plus.
- For SRF: B Tech or MTech in Civil, mechanical, or earth sciences with experience in flow through porous media, experimental techniques in geomechanics

Sl.	Name of the	Number	Essential Qualification	Consolidated
No.	Position	of		Emoluments per
		Vacancies		month
1.	Research	1	Ph.D. in Civil Engineering with	₹ 67000/m +27%
	Associate-III		two years' experience	HRA = 85,090/-
2.	Senior	1	M. Tech with two years'	₹ 42000/m +27%
	Research		experience or Ph.D. student	HRA = 53,340/-
	Fellow			

6. <u>Title of the project</u>: Integrated Investigation for Risk Assessment of the Dam

- Principal Investigator: Prof. P Anbazhagan, Dr. P Raghuveer Rao and Prof. Muthuvel Arigovindan
- ii. Funding Agency: Ministry of Jal Shakti, Government of India (MoJS, Gol)
- iii. Desirable qualification/experience: Experience and exposure in handling geotechnical and geophysical lab and field equipment and Data processing

Sl.	Name of the	Number	Essential Qualification	Consolidated
No.	Position	of		Emoluments per
		Vacancies		month
1.	Senior	2	M. Tech with two years'	₹ 42000/m +27%
	Research		experience/ B.Tech. with	HRA = 53,340/-
	Fellow		longer experience or Ph.D.	
			student	
2.	Lab	1	Diploma in Engineering/	₹ 34980 + 27%
	Technician		Geoscience with 12 years'	HRA = Rs.
			experience	44,424.6/-

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INSTRUCTIONS FOR APPLICANTS:

1. Candidates shall ensure that they are eligible for the position they intend to appear/apply for before appearing for the Interview.

- 2. Interested candidates should submit their request (in PDF format only) by email to iced.civil@iisc.ac.in with the subject as "Sl. No. of the project; Name of the Position applying for & candidate's name for e.g., 1; Senior Research Fellow; ABC" on or before the last date i.e. 26.06.2024, 11:59 PM with the following documents merged in a single PDF file with the file size not exceeding 2MB:
 - Cover letter mentioning the Advt. No. with the name of the position applying
 for, curriculum vitae, academic qualifications and the supporting details of
 industrial experience, publications, patents, prizes, the past research (only for
 RA, SRF) and plans for the future research (only for RA, SRF), Proof of age (e.g.
 Matriculation certificate) etc.
 - Candidate shall bring along with them the original degree(s)/certificate(s) and experience certificate(s), Proof of age (e.g. Matriculation certificate) at the time of interview for verification and ONE copy of each for submission.
- 3. No other mode of application/hardcopy submission of the online submitted application is accepted.
- 4. The details provided by the applicants in the resume will be duly verified before communicating the results. If the candidates fail to provide the authentic proof for the details filled-in by them, their candidature will be summarily forfeited.
- 5. The prescribed qualifications are the minimum requirement and the mere fact that a candidate possesses the same will not entitle them for being called for Interview.
- 6. Candidates working in Government / PSU / Autonomous Bodies should obtain NOC from the present employer and present it at the time of interview.
- 7. The Institute reserves the right to reject any application without assigning any reason. The Institute also reserves the right to cancel the recruitment for the particular post at any stage due to any administrative reason. No correspondence will be entertained in this regard.
- 8. Please note that no TA/DA is admissible for attending the interview. Candidates will have to appear for Interview at their own cost.
- 9. No in-campus accommodation will be provided in the Institute campus during the course of stay of the selected candidate/s.
- 10. Duration of appointment: Initial period of 1 Year, extendable on yearly basis for the project duration.
- 11. In the case of non-availability of suitable candidates with desired qualification for a designation, we would look for candidates with relative lower qualifications (e.g., RA-2 or RA-1 for RA-3; JRF/PA-I/PA-II for SRF; Lab Assistant for Lab Technician) as per DST guidelines.

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12. In the case of non-availability of suitable candidates with desired qualification for a designation, the PI reserves the right to keep the position vacant.

- 13. IISc is a premier research institute of international repute. Successful candidates are likely to get lucrative job offers from Govt. research establishments and private companies after the end of the projects. The projects also have publication potential, which will help in career building and higher studies. The project works also have the potential of being considered towards the candidate's thesis work, should he/she be selected as a student of the department (which is an independent selection process).
- 14. The Interview is tentatively scheduled for the first week of July 2024 at the department of Civil Engineering, IISc-Bengaluru. The interview date, time and exact venue will be communicated to the shortlisted candidates separately via email. Therefore, please mention active E-mail ID and primary contact number in the application form.
- 15. Selected candidates will have to join duty immediately on receipt of the offer.