



INDIAN INSTITUTE OF TECHNOLOGY
BIHTA, PATNA-801106
RESEARCH & DEVELOPMENT UNIT

ADVERTISEMENT NO: R&D/1525/DAM/625

DATED: 02.09.2026

Project No. R&D/SP/CEE/DAM/2026-27/1525

Applications are invited in the prescribed format only for the following assignment in a purely time-bound research project undertaken in this institute.

1. (a) Name of the temporary assignment : Junior Research Fellow (JRF)
(b) Number of Post : 1 (ONE)
(c) Duration of the Post : 1-years initially, followed by extension up to 3 years subject to satisfactory performance and project requirements
Development of a Rapid-Assembly Masonry System Using Fresh-Fabricated (Green-State) Ultra-Compressed Earth Blocks for Affordable and Sustainable Housing in India
2. Title of the temporary research project :
3. Name of the sponsoring Agency : Prime Minister Early Career Research Grant, ANRF
4. Consolidated Fellowship/Salary : Rs. 37,000/- pm for 1st and 2nd year and 42,000 pm for 3rd year + HRA as applicable (as per GoI rules)
5. Minimum Eligibility for Qualifications & Experience
 - a) For candidates with MTech/ME/MS as qualifying degree in Engineering/Technology in Structural Engineering or Applied Mechanics or in similar specializations (such as structural dynamics, earthquake engineering and building technology) with a minimum CPI of 6.5 or, 60% of marks.
 - b) For candidates with B. Tech./BE as a qualifying degree in Civil Engineering or relevant branches with experience of 3 years in relevant areas and 70% marks or 7.5 CPI.
 - c) The age should not exceed 28 years for a candidate with BE/BTech/M.Sc. degree as the highest qualification, and 32 years for a candidate with ME/MTech/MS degree as the highest qualification.
 - d) Relaxations for SC/ST/OBC/women/PD will be given as per the GOI norms.

Key responsibilities of JRF: Conduct experimental and analytical research on Ultra-Compressed for Rapid-Construction Blocks and innovative interlocking masonry systems for sustainable and affordable housing applications. The selected candidate will be involved in soil characterization, block fabrication, mechanical and durability testing, microstructural characterization, data analysis, and the development of machine-learning and numerical models. The candidate will also contribute to the design, fabrication, and testing of masonry assemblies and participate in cost and life-cycle assessment studies. This project provides an excellent opportunity to work on cutting-edge research at the



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intersection of sustainable construction materials, structural engineering, artificial intelligence, and construction automation, with the long-term goal of enabling block-based 3D printing of masonry for eco-efficient, affordable & rapid construction. Candidates with a strong interest in these areas are particularly encouraged to apply.

6. Application procedure:

- a) Candidates interested in this position and satisfying the qualification criteria should write an email to the project investigator, Dr. Nitin Kumar, Department of Civil and Environmental Engineering, IIT Patna (Email ids: ntnkumar@iitp.ac.in, ntnkumar102@gmail.com)
- b) The subject of the email should read as “**Research Position DAM-1525**”. **The last date for receiving this email is 14th September 2026.**
- c) The email **MUST** include the **scanned/PDF copy of the duly filled application form (see below) with the** applicant’s signature.
- d) The email **MUST** include a self-attested scanned PDF copy of all supporting documents (degree certificates, mark-sheets, and category certificate, if applicable).
- e) A copy of all (if any) Scopus-indexed journal papers should be attached to the email.
- f) The application should additionally include a **500-word statement of purpose (SOP)**. This document should elaborate on your interest in the broad area of this project and any relevant prior experience/skills that would help you with the assigned research problem.
- g) The application should also include a brief Academic CV not exceeding two pages.
- h) Please use the **file names as: Post-applied_FirstName_DocumentName.pdf (e.g., JRF_X_Y).**

IIT Patna reserves the right not to shortlist any candidate if the application email does not contain complete information, supported by the documents listed above. All candidates who apply via email by **14th September 2026** (deadline) and are shortlisted will be informed regarding further details by **19th September 2026**.

Tentative Date of Written Test/Interview: 23rd to 28th September 2026, Candidates shall be solely responsible for ensuring reliable internet connectivity for the online interview. If a physical interview is required, shortlisted candidates will be notified in advance through email.

Applicants may also contact Dr. Nitin Kumar for further details on the research project.

Assistant Registrar

Copy to:

1. Associate Dean, R&D, IIT Patna
2. All Wardens, Halls of Residence, IIT, Patna
3. All other IITs/IITBHU/NITs/Universities
4. Advertisement file
5. Project file



Form No. RD-M003

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FORMAT OF APPLICATION

Name & Address Including email id and Phone no. (for Correspondence)	Category (GEN/OBC/SC/ST/PD)	DOB dd/ mm/yy	Professional Exam. (GATE/CSIR-NET, etc) & Validity
NAME IN CAPITAL Address: Phone: Email:			

Educational Qualification

Institute/ Board	Exam Passed	Year of Passing	% of Marks/CPI
	10 th Class		
	12 th Class		
	Bachelors (B.Sc/B.Tech/B.E./BCA) or equivalent		
	Masters (M.Sc/M.Tech/M.E/MCA/MA) or equivalent		

Qualifying degree	Degree/ major/Specialization
(B.Sc/B.Tech/B.E./BCA)	
(M.Sc/M.Tech/M.E/MA/MCA)	
Others	

Signature of applicant

Date:

Place: