



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

ADVERTISEMENT NO: R&D/820/PMD/331

DATED: 29.12.2023

Project No. R&D/SP/ME/PMD/2023-24/820

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 : 01 (One)
(c) Duration of the Post : 1 year initially followed by extension subject to satisfactory performance
2. Name of the temporary research project : Portable Microfluidic Device for Onsite Diagnosis of Traumatic Brain Injuries
3. Name of the sponsoring Agency : Indian Council of Medical Research (ICMR)
4. Consolidated Fellowship/Salary : 31000 + HRA (as per GoI rules) for the first two years followed by 35000 + HRA (as per GoI rules)
5. Minimum Eligibility for Qualifications & Experience :
 - a) For candidates with M.Tech./ME/MS as qualifying degree in an Engineering/Technology in Mechanical, Electrical, Electronics, Mechatronics, Instrumentation and control, Medical and Biomedical or, relevant branches with a minimum CPI of 6.5 or, 60% of marks, and GATE/NET qualification.
 - b) For candidates with Master's degree in science in a relevant area with a minimum CPI of 7.5 or, 70% of marks, and GATE/NET qualification.
 - c) For candidates with B. Tech./BE as a qualifying degree in Engineering/Technology in Mechanical, Electrical, Electronics, Mechatronics, Instrumentation, Biomedical or, relevant branches, 70% marks or 7.5 CPI in B.Tech/BE from institutes other than IITs/IISc with valid GATE score and 8.0 CPI in B.Tech./BE from IITS and IISc.
 - d) The age should not exceed 28 years for a candidate with BE/B.Tech/M.Sc. degree as the highest qualification and 32 years for a candidate with ME/M.Tech/MS degree as the highest qualification.
 - e) Relaxations for SC/ST/OBC/women/PD will be given as per the GOI norms.

Candidates with relevant work and/or prior research experience in the fields of **Microfluidics; Bio-Microfluidics; Medical, Biomedical Engineering and Sciences, or, Biotechnology** are encouraged to apply.

6. Description of the OFFLINE MODE of the selection process:

Application procedure:

1. Candidates interested in this position and satisfying the qualification criteria with experience in the relevant field of research should write an email to the project investigator



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Dr. Abhishek Raj, Department of Mechanical Engineering, IIT Patna (Email IDs: araj@iitp.ac.in and araj367iitp@gmail.com).

2. The **subject of the email** should read as “*JRF Position PMD-820*”. The last date for receiving this email is **25th Jan 2024**.
3. The email **MUST** include the **scanned/pdf copy of the duly filled application form** (see attached Word document) with the applicant’s signature.
4. The email **MUST** include self-attested scanned **pdf copy of all supporting documents** (degree certificates, mark-sheets, GATE scorecard (if any), and category certificate, if applicable).
5. Copy of all (if any) Scopus-indexed **journal papers** should be attached with the email.
6. 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 which would help you in solving the assigned research problem.
7. The application should also include a brief **Academic CV** not exceeding two pages.

This project is specialized, time-bound, and target orientated. The qualification and experience given above in this advertisement are at the minimum requirement level and do not guarantee an interview call if other candidates with higher qualifications and/or experience desirable and commensurate with project objectives are available. Further, IIT Patna reserves the right to not shortlist any candidate in case the application email does not contain complete information backed up by supporting documents as listed above. All candidates who apply via email by **25th Jan 2024 (deadline)** and are shortlisted will be informed regarding further details including date of Interview by **27th Jan 2024**. The tentative date of the interview in ONLINE mode will be **29th Jan 2024**.

8. **About the Project:** The project aims the development of a microfluidic device for rapid onsite detection of traumatic brain injuries. The developed device would benefit the human healthcare system by providing a rapid detection tool so that medications can be started early and the lives of patients with brain injury can be saved. Applicants may also contact **Dr. Abhishek Raj** for further details on the research project.

Deputy Registrar

Copy to:

1. Associate Dean, R&D, IIT Patna
2. Advertisement file
3. Project file



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FORMAT OF APPLICATION FOR JRF

Name & Address Including email id and Phone no. (for Correspondence)	Category (GEN/OBC/SC/S T/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	

Date:

Place:

Signature of applicant