



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

ADVERTISEMENT NO: R&D/1491/TMC/585

DATED: 01.06.2026

Project No: **R&D/SP/ME/TMC/2026- 27/1491**

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** : Initially 01 year and can be extended up to 03 Years or till completion of project (Whichever is earlier) subject to satisfactory performance.

(Note: JRF may be inducted into the PhD programme of Dept. of ME, IIT Patna upon fulfilment of credentials and requirement as per institute norms)

2. **Name of the temporary research project:** **Theranostic PDMS Microparticle for cancer cell capture and inflammation- Responsive Healing in Vascular Microenvironments**
3. **Name of the sponsoring Agency** : **Advanced Research Grant (ARG) Program, ANRF**
4. **Consolidated Fellowship/Salary** : **37000/- pm + HRA as applicable (Appropriate increment in Fellowship will be provided as per funding agency guidelines]**

5. Minimum Eligibility for Qualifications & Experience:

- a) For candidates with **M.Tech/M.E./M.S. in Mechanical Engineering, Mechatronics, Instrumentation and Control, Medical and Biomedical or, relevant** branches with a minimum CPI of 6.5 or 60% of marks, and GATE qualification not older than 05 years from the last date of application / NET qualification in relevant discipline. Eligibility criteria will be relaxed by 5% marks or 0.5 CPI for SC/ST applicants as per Government of India norms.
- b) For candidates with **B.Tech / B.E./ B.S. degree in Mechanical, Mechatronics, Instrumentation, Biomedical or relevant branches** with a minimum CPI of 6.5 or 60% of marks, and **valid GATE Score / NET** qualification.
- c) For candidates with **M.Sc. degree in Mechanical, Mechatronics, Instrumentation, Biomedical or relevant branches** with a minimum CPI of 6.5 or 60% of marks, and **GATE** qualification not older than 05 years from the last date of application / NET qualification in relevant discipline.
- d) The requirement of **GATE/NET** may be waived for candidates holding a **B.Tech/B.E./B.S.** degree from Centrally Funded Technical Institutes (**CFTIs**) with a **CGPA of 8.0 or higher** (on a 10-point scale), subject to their performance in the interview and approval as per institute norms.
- e) The upper age limit for JRF shall be 28 years for a candidate with B.Tech/B.E./B.S./M.Sc., and 32 years for a candidate with M.Tech./M.E./M.S. degree as the highest qualification to be calculated as on the last date of application.
- f) Age relaxations for SC/ST/OBC/Women/PwD will be given as per the GoI norms.



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- g) Preference will be given to candidates with prior experience in areas such as microfluidics and lab-on-chip systems, biomedical/biotechnology/ bioengineering, nanoparticle synthesis and characterization, drug delivery and biomaterials, fluorescence imaging (e.g., carbon/DNA dots), cell culture and cancer biology, organ/wound-on-chip models, magnetic particle manipulation, microscopy techniques, or biomedical instrumentation and image analysis.

Note: Candidates with research publications, prior laboratory experience, interdisciplinary project exposure, and strong motivation toward pursuing a PhD in the broad area of biomedical microfluidics, theranostics, and targeted drug delivery will be preferred.

Key responsibilities of the JRF include:

Conduct literature review; perform experiments (device fabrication, microfluidic/biomedical platforms, biological studies); assist in fabrication, characterization, testing, and validation of microparticles and devices; support cell culture, fluorescence imaging, biomarker and therapeutic studies; analyze data and prepare reports/publications; assist in project planning, procurement, and documentation; collaborate with teams; and ensure compliance with safety, ethical, and institute guidelines.

6. Application procedure:

- i. Candidates interested in this position and satisfying the qualification criteria should write an email to the Project Investigator (PI), Dr. Abhishek Raj, Dept. of Mechanical Engineering, IIT Patna (Email id: araj@iitp.ac.in), with a copy to Co-PI, Prof. Prolay Das, Department of Chemistry, IIT Patna (Email ID: prolay@iitp.ac.in)
- ii. The subject of the email should read as “**Application for JRF Position (TMC- 1491)**”. ***The last date for receiving application, with all enclosures, by email is 14th June 2026.***
- iii. The application **MUST** include the **scanned/pdf copy of duly-filled application form** (in the prescribed format; please see below) with applicant’s signature.
- iv. The application also **MUST** include self-attested scanned/pdf copy of all supporting documents (degree certificates, mark-sheets, GATE/NET scorecard, and category certificate, if applicable) as enclosures.
- v. Copy of the peer-reviewed journal papers, if any, should also be enclosed with the application.
- vi. The application should additionally include a **300-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 the assigned research problem.
- vii. The application should also include a brief academic CV not exceeding two pages.

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 14th June 2026 (deadline) and are shortlisted will be informed by email regarding further details by 16th June 2026.



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Tentative Date of Written test/Interview: Between June 18-23, 2026. Applicants shall be solely responsible for ensuring the availability of reliable internet connectivity on the **date of the online written test and interview**. In case candidates are required to appear physically for the written test and/or interview, they shall make their own arrangements for travel and accommodation. No TA/DA or remuneration shall be provided for attending the written test/interview.

For any query contact Investigator(s) : **Dr. Abhishek Raj, Dept. of Mechanical Engineering, IIT Patna, Emails: araj@iitp.ac.in, : 06115-233823.**

Assistant Registrar (R&D)

Copy to:

1. Associate Dean, R&D, IIT Patna
2. Associate Dean Academics (PG)
3. DR-Academic, AR-Academic
4. All Wardens, Halls of Residence, IIT, Patna
5. All other IITs/IITBHU/Universities
6. Advertisement file
7. Project file



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PROJECT CODE: R&D/SP/ME/TMC/2026- 27/1491
ADVT NO: R&D/1491/TMC/585 **DATED: 01.06.2026**

FORMAT OF APPLICATION FOR JRF

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/CP I
	10 th Class		
	12 th Class		
	Bachelors (B.Sc/B.Tech/B.E./BCA) or equivalent		
	Masters (M.Sc/M.Tech/M.E/MC A/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