



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

ADVERTISEMENT NO: R&D/1535/MMV/619

DATED: 07.08.2026

Project No: **R&D/SP/ME/MMV/2026-27/1535**

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:** Microrobot-Aided Mechanoporation for In-Vitro Drug Delivery in Cancer Cells: Pioneering Personalized Drug Screening for Improved Patient Outcomes

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) Candidates should possess M.Tech/M.E./M.S. in Mechanical Engineering, Mechatronics, Robotics, Instrumentation and Control, Medical and Biomedical or, relevant branches with a minimum CPI of 6.5 or 60% of marks. Exceptional candidates with B.Tech / B.E./ B.S. degree in Mechanical, Mechatronics, Robotics, Instrumentation, Biomedical, Biotechnology or relevant branches with a minimum CPI of 6.5 or 60% of marks OR M.Sc. degree in Mechanical, Mechatronics, Instrumentation, Biomedical, Biotechnology, or relevant branches with a minimum CPI of 6.5 or 60% of marks will also be considered. Eligibility criteria will be relaxed by 5% marks or 0.5 CPI for SC/ST applicants as per Government of India norms.

b) Candidates appearing in the final semester/year of their M.Tech./B.Tech/BS/M.Sc. degree programme are also eligible to apply for the above position. However, if selected, their appointment shall be provisional and subject to the submission of proof of successful completion of the qualifying degree within six (6) months from the date of selection. Failure to submit the requisite degree certificate or provisional degree within the stipulated period may result in cancellation of the offer of appointment.

c) It is preferred that the candidates possess GATE qualification not older than 05 years from the last date of application OR NET qualification in relevant discipline. However, exceptional candidates without GATE/NET qualification may be considered.



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d) The selected JRF may be admitted to the Ph.D. program of IIT Patna subject to their performance in the written/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.

g) Preference will be given to candidates with prior experience in one or more areas among robotics, microfluidics and lab-on-chip systems, biomedical/biotechnology/ bioengineering, drug delivery and biomaterials, cell culture and cancer biology, 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; microrobot design and control; 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 fill the online form <https://forms.gle/xLXBfUpESwFXTdRS8> In case of any difficulty or doubts feel free to write an email to the Project Investigator (PI), Dr. Atul Thakur, Dept. of Mechanical Engineering, IIT Patna (Email id: athakur@iitp.ac.in), with a copy to Co-PI, Dr. Abhishek Raj, Department of Mechanical Engineering, IIT Patna (Email ID: araj@iitp.ac.in). The subject of the email should read as “**Regarding JRF Position (MMV-1535)**”. *The last date for receiving application, with all enclosures, by email is 14th August 2026.*
- ii. The application **MUST** include the **scanned/pdf copy of duly-filled application form** (in the prescribed format uploaded on the google form; please see below) with applicant's signature.
- iii. 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.
- iv. Copy of the peer-reviewed journal papers, if any, should also be enclosed with the application.
- v. 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.
- vi. The application should also include a brief academic CV not exceeding two pages.



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IIT Patna reserves the right to not shortlist any candidate in case the application form does not contain complete information backed up by supporting documents as listed above.

All candidates who apply by 21st August 2026 (deadline) and are shortlisted will be informed by email regarding further details by 24th August 2026.

Tentative Date of Written test/Interview: Between August 25-27, 2026. 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. Atul Thakur, Dept. of Mechanical Engineering, IIT Patna Emails: athakur@iitp.ac.in** **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. Advertisement file
5. Project file



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ADVT NO: R&D/1535/MMV/619

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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	

Signature of applicant

Date:

Place: