

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

### ADVERTISEMENT NO: R&D/622/SERB/238

**DATED: July 18, 2022** 

Project No. DSB-622

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	: PhD position funded through project - JRF
(b) Number of Post	: 2 (Two)
(c) Duration of the Post	: Three years initially followed by extension subject to satisfactory performance.
2. Name of the temporary research project	: "Decoding the Science of Boiling via Bubble Acoustics: Towards Pre-emptive Control of Vapor Explosion in Industrial Applications".
3. Name of the sponsoring Agency	: SERB through SwarnaJayanti Fellowship Scheme
4. Fellowship/Salary	: Rs. 31,000/- plus HRA (as per GoI rules) for the first two years followed by Rs. 35,000/- plus HRA (as per GoI rules)

## 5. Qualifications & Experience

- a) For candidates with M.Tech./ME/MS as qualifying degree, first class (minimum 65% marks or 7.0 CPI) in M.Tech./ME/MS with GATE/NET qualifications and first class (minimum 60% marks or 6.5 CPI) in B.Tech./BE, 12th and 10th class.
- b) For candidates with B. Tech./BE as qualifying degree, 75% marks or 8.0 CPI in B.Tech/BE form institutes other than IITs/IISc and 7.0 CPI in B.Tech. from IITS and IISc with valid GATE score and first class (minimum 60% marks or 6.5 CPI) in 12th and 10th class.
- c) 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.
- d) 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 Multiphase Flows and Heat Transfer, Surface Science, Computational Fluid Dynamics, Artificial Intelligence and Machine Learning Techniques are encouraged to apply.

# 6. Description of the ONLINE MODE of the selection process:

### **Application procedure:**

 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 Dr. Rishi Raj, Department of Mechanical Engineering, IIT Patna (Email IDs: rraj<at>iitp.ac.in and rraj.iitp<at>gmail.com).



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- 2. The **subject of the email** should read as "*JRF Position DSB-622*". The last date for receiving this email is **29<sup>th</sup> July 2022**.
- 3. The email MUST include the **scanned/pdf copy of duly filled application form** (see attached word document) with 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 a highly 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 interview call if other candidates with higher qualification 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 **29<sup>th</sup> July 2022** (deadline) and are shortlisted will be informed regarding the further details by **3<sup>rd</sup> August 2022**. The date of online interview will be announced and informed to the shortlisted candidates in due course of time.

8. About the Project: Follow this link to know more about this project:

https://dst.gov.in/swarnajayanti-fellow-working-develop-technology-prediction-and-control-vapor-explosion-induced Applicants may also contact Dr. Rishi Raj and visit <u>www.iitp.ac.in/~rraj</u> for further details on the research undertaken in the Thermal and Fluid Transport Laboratory (TFTL), IITP.

**Deputy Registrar** 

Copy to:

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