



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

ADVERTISEMENT NO: R&D/622/SERB/235

DATED: July 04, 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 : [Research Associate – I \(RA-I\)](#)
(b) Number of Post : [01 \(one\)](#)
(c) Duration of the Post : [3 years](#)
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 : [Rs 47,000/- per month plus HRA \(as per GoI rules\)](#)
5. Qualifications & Experience :
[Ph.D. \(Mechanical or equivalent\) with prior research experience in the broad area of physical sciences as evidenced through quality journal publications, patents, and technology development. Candidates who have submitted their thesis may also apply. However, if selected, final offer and joining will be subject to award of PhD degree.](#)

or

[M.Tech. \(Mechanical, Thermal, Manufacturing, Mechatronics, or equivalent\) with 3 years' experience in an area relevant to the project needs. The candidate should have demonstrated research interest through quality journal publications, patents, and technology development.](#)

[The upper age limit for applying for the RA-1 position shall be as per SERB/DST norms. Relaxation in experience and age is permissible only for suitable candidates with higher qualification. 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:

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 Dr. Rishi Raj, Department of Mechanical Engineering, IIT Patna (Email IDs: rroj@iitp.ac.in and rroj.iitp@gmail.com).
2. The **subject of the email** should read as "[RA-1 Position DSB-622](#)". The last date for receiving this email is **22nd July 2022**.



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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 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. **Two recommendations letters** (one must be from the PhD supervisor for candidates with PhD as the highest degree) should be sent to the above stated email addresses by the application deadline date of **22nd July 2022**.
8. 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 **22nd July 2022** (deadline) and are shortlisted will be informed regarding the further details by **27th July 2022**. The date of online interview will be announced and informed to the shortlisted candidates in due course of time.

9. **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 www.iitp.ac.in/~rraj 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