

## INDIAN INSTITUTE OF TECHNOLOGY TIRUPATI

Date: 21/07/2022

## भारतीय प्रौद्योगिकी संस्थान तिरुपति

Yerpedu – Venkatagiri Road, Yerpedu Post, Tirupati District, A.P. 517619.

No: Advt/ IITT/CSRC/22-23/09

Applications are invited from eligible Indian nationals for the Junior Research Fellow (JRF) post in a time-bound Science and Engineering Research Board (SERB), India-sponsored project undertaken in the Department of Chemistry.

<b>Temporary Position</b>	Junior Research Fellow – 1
Essential Qualification	First Class or equivalent in Masters in Chemical Science or Physical Science with a good academic record and with valid CSIR-UGC NET including LS or GATE score.
Project Title	Theoretical Investigation of Bio-inspired Channel Based Membrane for
G	Water Purification
Sponsoring Agency	Science and Engineering Research Board (SERB), India
Consolidated monthly Salary	Rs. 31,000 per month + HRA
Principal Investigator	Dr. Rajib Biswas
Department/Centre	Chemistry
Tenure of Assignment	5 Months, extendable up to a maximum of two years subject to satisfactory performance.
Desired Experience	<ul> <li>Must have exposure to theoretical &amp; computational chemistry research, a solid understanding of physical chemistry</li> <li>Must be willing to work efficiently in a team environment, self-motivated, and work under a variety of challenging research conditions</li> <li>Must have good oral and written communication skills</li> <li>Must demonstrate the highest work ethics.</li> </ul>
Nature of the Work	The project includes the use and development of theoretical and computational approaches to investigate the molecular mechanism of water transport through a bio-inspired channel-based membrane. Eventually, the process of water desalination and removal of heavy metals need to be explored.
Age Limit	28 years (Relaxed for exceptional candidates)
Last date application	31 <sup>st</sup> July 2022
Notes	Given the nature of the project, work needs to be carried out requires
	extensive literature survey, discussions, and computational work.
	Therefore, the candidate is expected to reside on-campus at IITT to use
	all the available facilities to complete the tasks.

Eligible candidates must send a **detailed CV** (**maximum 2 pages**) specifying their qualifications and experience **and a brief statement of purpose** on or before **31**<sup>st</sup> **July 2022** to Dr. Rajib Biswas, Assistant Professor, Department of Chemistry, IIT Tirupati, at <u>rajib@iittp.ac.in.</u>

The statement of purpose must include responses to the following questions:

- 1. What motivates you towards pursuing the JRF position? (max. 200 words)
- 2. Describe your research interests in the advertised area. (max. 300 words)
- 3. Explain the tentative research plan briefly by using schematics, figures, flowcharts, and relevant references. (max. 500 words).

The shortlisted candidates will be informed by **Email only**. Selection will be based on the qualification, experience, and interview. **The interview and other logistics will be conducted via online only**. The interview date will be notified to the shortlisted candidates by Email. The candidate may appear in the interview through video conferencing. IIT Tirupati reserves the right to reject any or all the applications without assigning any reason thereof.