



# INDIAN INSTITUTE OF TECHNOLOGY BOMBAY POWAI, MUMBAI 400076.

**Advertisement No.: IRCC/EXT005/2025**

**Job Title**

Senior Research Fellow

**Job Reference Number**

50661733

**Application End Date**

22.01.2025

**Type of Employment**

Proj. Staff Contract

**No. of Position(s)**

1

**IITB Project Recruitment:**

Project title: Measurements and Simulations of thermal transport in non-Fourier's regime

About the project: Our focus of the project is to measure and simulate nanoscale heat generation sources instead of nanoscale samples, i.e., thin films. Nano-heaters are abundant in the semiconductor industry as the transistor's gate size is aggressively scaled down to 1nm. A combined experimental and simulation approach is necessary to develop robust methods and validate them.

**Essential Qualifications & Experience:**

Post Graduate Degree in Basic Science OR Graduate / Post Graduate Degree in Professional Course selected through a process described through any one of the following:

- Scholars who are selected through National Eligibility Tests - CSIR-UGC NET including lectureship (Assistant Professorship) and GATE.
- The selection process through National level examinations conducted by Central Government Departments and their Agencies and Institutions such as DST, DBT, DAE, DOS, DRDO, MHRD, ICAR, ICMR, IIT, IISc, IISER etc.

with 2 years of research experience.

**Job Profile:**

The candidate will work on developing an NIR pump-X-ray probe setup using ultrafast lasers and perform experiments to probe heat transfer in nano heaters. The candidate will also carry out finite element simulations of the heat transfer.

**Pay Details:**

Consolidated salary Rs.42000/- p.m. + HRA

***General information:***

The position is temporary for a period of 1 year and tenable only for the duration of the project. The appointment is for time bound project and the candidate is required to work mainly for the successful completion of the project. The selection committee may offer lower or higher designation and lower or higher salary depending upon the experience and performance of the candidate in the interview.

Candidates called for interview will be required to attend at his/ her own expenses.

For any queries/clarification please contact: [recruit@ircc.iitb.ac.in](mailto:recruit@ircc.iitb.ac.in)