

Junior Research Fellow (JRF) in BARC sponsored project at the Smart Energy & Thermal Transport Research Lab at IIT Gandhinagar

Broad Subject Area: Thermo-fluids

Minimum Qualification: B.Tech/B.E. in Mechanical/Chemical/Materials Engineering or related fields, or MSc in Physics/Chemistry with GATE/NET qualification.

Desired Background: Strong foundation in the areas of heat transfer, fluid mechanics and thermodynamics. Candidates with prior experience in developing experimental setups will be given preference. Strong teamwork and communication skills mandatory.

Remuneration: Monthly remuneration will be Rs. 31,000/- per month (HRA of Rs. 7,440/- will be provided as per institute norms if accommodation is not available within the institute.)

No. of positions: 1

Project: Investigating Vapor Condensation for Thermal Desalination Processes

Duration: Initial appointment is for 1 year, extendable up to 1 more year based on performance.

Key Responsibilities

- Rational design and fabrication of scalable, micro- and nanoengineered metal tubes surfaces for heat transfer enhancement through dropwise condensation.
- Perform vapor condensation experiments in atmospheric conditions and in pure vapor environmental chamber to quantify condensation heat transfer performance on external surfaces of metal tubes.
- Investigation of droplet nucleation and condensation dynamics during vapor condensation through modelling, design, experiments and measurement of droplet dynamics.
- Project progress reports, presentation to BARC team on research progress

Application Procedure

All applicants are required to apply by submitting the form below

<https://forms.gle/kPQjxCJDmayz79Rp6>

Application Deadline

The deadline for submission is May 25th, 2024.