



# INDIAN INSTITUTE OF TECHNOLOGY BOMBAY POWAI, MUMBAI 400076.

**Advertisement No.: IRCC/EXT184/2024**

## **Job Title**

Project Research Scientist

## **Job Reference Number**

50614866

## **Application End Date**

12.07.2024

## **Type of Employment**

Proj. Staff Contract

## **No. of Position(s)**

2

## **IITB Project Recruitment:**

Project title: Hydrogen pressure vessel manufacturing using Textile based CompositesTeCoPV India.

About the project: Hydrogen pressure vessel manufacturing using Textile based Composites.

## **Essential Qualifications & Experience:**

PhD in material science with specialization in fracture analysis, microstructure analysis or similar with 2+ years of work experience.

Instrumentation and software skills required:

Deform, Abaqus, Ansys, etc

Optical and Scanning electron Zeiss microscopy and computer system, etc

CNC, Universal Tensile Testing Machine (UTM), Hydraulic LDH testing machine, Friction testing machine, etc

C, C++, MATLAB, Python

## **Job Profile:**

Advanced understanding of

- Advanced Composite Materials,
- Mechanical Behavior of Materials,
- Fracture Mechanics and Failure Analysis,
- Modeling, and Simulation, Finite Element Analysis,
- Additive Manufacturing,

\* Knowledge and experience with various fatigue and mechanical testing, mechanical processing, and CNC, machines,

\* Independently handle Mathematical Modeling of Microstructure and Microtexture Evolution and analysis of the same

\* Develop algorithm and software with graphical user interface to generate assemble of multiple microscopic images for better analysis

\* Understanding of Machine Learning, Industry 4.0 as required by the project

\* Lead the whole team for timely completion of the project with diligence and accuracy of the results

\* Coordinate with partners, ensure day-to-day communication. Actively manage, administer and participate in decision-making for the project.

\* Actively engage in high-quality research and publication and presenting results at scientific conferences in the area of specialization

***Pay Details:***

Level PR- O2 : Salary range from Rs.42000 to Rs. 84000 + Rs.7500.00/- Out Of Campus Allowance (if applicable) p.m.

***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)