



INDIAN INSTITUTE OF TECHNOLOGY BOMBAY POWAI, MUMBAI 400076.

Advertisement No.: IRCC/EXT241/2022

Job Title

Project Research Assistant

Job Reference Number

50364392

Application End Date

07.11.2022

Type of Employment

Proj. Staff Contract

No. of Position(s)

2

IITB Project Recruitment:

Project title: Development of a triboelectric separator equipment

About the project: The triboelectric effect refers to the charges developed when two different materials are separated from one another. The difference in charges developed can be utilised to separate materials by applying an electric field.

Essential Qualifications & Experience:

BE/BTech/MA/MSc/MCA/MBA or equivalent degree OR
BA/BSc or equivalent degree with 2 years of relevant experience

Candidates holding a Bachelor's, Master's or PhD degree in any of the following disciplines are encouraged to apply: Physics, Physical Chemistry, Chemical engineering, Mechanical engineering, Materials science and engineering, etc.

Job Profile:

The desired candidate will be required to perform high speed videography of transport of particles under high applied electric field and analyse the images to characterise their motion (particle velocity, acceleration, charge transfer at contact with electrode or other obstacles, etc) as a function of particle size and composition, applied field strength, nature of electrode, etc. The candidate is also expected to setup a mathematical model (using FEM based software) to simulate the experiments and understand the mechanism of transport under applied electric field.

Pay Details:

Level PR-A3: Salary range from Rs.25200 to Rs 50400 + Rs.5000.00/- 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