Advertisement No.: IRCC/EXT180/2022

Job Title

Project Research Associate

Job Reference Number 50353416

Application End Date 23.08.2022

Type of Employment Proj. Staff Contract

No. of Position(s)

IITB Project Recruitment:

Project title: Development of software on MATLAB etc. for optimization of freight car parameters in dynamic condition

About the project: The project proposes to develop an accurate mathematical model of a freight car identified by the Indian Railways. The developed mathematical model will be implemented in an object orientated software platform which will permit easy analysis and allow straightforward modifications to the existing model. It will also permit parametric analysis of various components of the freight car. These features will not help in understanding the dynamic behaviour of the freight car under different operating conditions but also help to optimize various parameters of the freight car by facilitating easy analysis of alternate designs.

Essential Qualifications & Experience:

MTech/ME/MDes or equivalent degree

BTech/BE/MA/MSc/MCA/ MBA or equivalent degree with 2 years relevant experience It is desirable that at least one of the qualifying degrees is in Mechanical/Aerospace/Civil Engineering

Job Profile:

As part of the responsibilities, the selected candidate is expected to:

- 1. Develop a mathematical model of the selected freight car.
- 2. Validate the mathematical model for a set of predefined operating conditions by comparing it with existing/available results.
- 3. Develop a software platform for dynamic simulation of a freight car

which permits parametric studies.

Pay Details:

Level PR-O1: Salary range from Rs.33600 to Rs 67200 + Rs.6250.00/- 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