

No.: Advt/ IITT/CSRC/22-23/07

Date: 15 June 2022

Applications are invited from eligible Indian nationals for the post of Project Scientist I in a time-bound Government of India Ministry of Road Transport & Highways (MoRTH), New Delhi sponsored project undertaken in the Department of Mechanical Engineering.

<b>Temporary Position</b>	<b>Project Scientist I</b>
<b>Essential Qualification</b>	Ph.D. in Mechanical Engineering / Automobile Engineering or equivalent discipline from a reputed university / institution.
<b>Project Title &amp; Description</b>	National facility for Accelerated Testing of Pavements and Vehicle Dynamics (NATPaVeD) Description: One of the tasks of the project involves development of a mechanical test rig that facilitates a load application through a vehicular assembly on a guided pavement test track.
<b>Sponsoring Agency</b>	Ministry of Road Transport & Highways (MoRTH), New Delhi
<b>Consolidated monthly Salary</b>	INR 61,600
<b>Principal Investigators</b>	Dr. B. Krishna Prapoorna; Dr. Sriram Sundar
<b>Department/Centre</b>	Mechanical Engineering
<b>Tenure of Assignment</b>	1 year, extendable to another 1 year subject to satisfactory performance
<b>Essential skills/ knowledge</b>	New product development, Design for manufacturing and assembly (DFMA), Failure mode effect analysis (FMEA), Machine design, Finite element modeling, Vibrations, Dynamic analysis, and Strength of materials.
<b>Desired Experience</b>	Exposure to relevant fields encompassing product design based on strength, deflection, and fatigue; reliability analysis; fabrication procedures; vehicle dynamics; automotive NVH; signal processing; and statistics. <ul style="list-style-type: none"> <li>• Must be proficient in CAE tools such as SolidWorks, AutoCAD, Abaqus, and ANSYS.</li> <li>• Must be willing to work efficiently in a team environment, self-motivated, and work under a variety of challenging research conditions</li> <li>• Must have good oral and written communication skills</li> <li>• Must demonstrate highest work ethics.</li> </ul>
<b>Nature of the Work</b>	The person would be responsible for the following: <ul style="list-style-type: none"> <li>• Evaluation of the various design concepts of the mechanical test rig.</li> <li>• Development of the detailed design (including analysis) of the mechanical subsystems of the facility.</li> <li>• Assist in fabrication (in-house or outside) and installation of the components of the mechanical subsystems as well as instrumentation of the systems.</li> <li>• Perform actual test runs and help develop test protocols/ standards.</li> </ul>
<b>Age Limit</b>	35 years (Relaxed for exceptional candidates)
<b>Last date of Application</b>	30 June 2022
<b>Notes</b>	Given the nature of the project, work needs to be carried out in the laboratory and field. Therefore, it is expected that the candidate resides on-campus IITT to create and use the laboratory facilities to complete the tasks.

Eligible candidates must send a **detailed CV** specifying the qualifications and experience **and a statement of purpose (CV and statement of purpose must be sent as a one-single PDF with name clearly marked on the file as follows: IITT\_PS\_Sriram)** on or before **30 June 2022** to Dr. Sriram Sundar, Assistant Professor, Department of Mechanical Engineering, IIT Tirupati at [sriram@iittp.ac.in](mailto:sriram@iittp.ac.in)

The statement of purpose must include responses to the following questions:

1. What motivates you towards pursuing this position? (max. 200 words)
2. Describe your research interests in the advertised area and provide a framework to accomplish the research tasks aligned with the project. Please use schematics, figures, flowchart, and relevant references, as appropriate. (max. 500 words).

The shortlisted candidates will be informed by email only. Selection will be based on the qualification, experience, and interview. The interview details will be shared in the call letter. The interview date will be notified to the shortlisted candidates by email. IIT Tirupati reserves the right to reject any or all the applications without assigning any reason thereof.