

## INDIAN INSTITUTE OF TECHNOLOGY TIRUPATI

**Date: 04 July 2022** 

## भारतीय प्रौद्योिगकी संस्थान ितरुपित

Renigunta Road, Settipalli Post, Tirupati District, Tirupati, A.P – 517506

No.:Advt/IITT/CSRC/2223/07

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.

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Temporary Position	Project Scientist I  Ph D in Machanical Engineering on agriculant dissipling from a
Essential	Ph.D. in Mechanical Engineering or equivalent discipline from a reputed university / institution
Qualification	OR
	M.Tech/ M.E./M.S. in Mechanical Engineering or equivalent
	discipline from a reputed university / institution with 5 years of
	academic and/or industrial experience in product design.
Project Title &	National facility for Accelerated Testing of Pavements and Vehicle
Description	Dynamics (NATPaVeD)
Description	Description: One of the tasks of the project involves development of
	a mechanical test rig that facilitates a load application through a
G • •	vehicular assembly on a guided pavement test track.
Sponsoring Agency	Ministry of Road Transport & Highways (MoRTH), New Delhi
Consolidated monthly	INR 61,600
Salary	
Principal Investigators	Dr. B. Krishna Prapoorna; Dr. Sriram Sundar
Department/Centre	Mechanical Engineering
<b>Tenure of Assignment</b>	1 year, extendable to another 1 year subject to satisfactory
	performance
Essential skills/	New product development, Design for manufacturing and assembly
knowledge	(DFMA), Failure mode effect analysis (FMEA), Machine design, Finite
	element modeling, Vibrations, Dynamic analysis, and Strength of
	materials.
Desired Experience	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> <li>Must be proficient in CAE tools such as SolidWorks, AutoCAD, Abaqus, and ANSYS.</li> </ul>
	• Must be willing to work efficiently in a team environment, self-
	motivated, and work under a variety of challenging research
	<ul> <li>Must have good oral and written communication skills</li> </ul>
	<ul> <li>Must demonstrate highest work ethics.</li> </ul>
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Age Limit Last date of Application	<ul> <li>The person would be responsible for the following:</li> <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> <li>35 years (Relaxed for exceptional candidates)</li> </ul>

Notes	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 10 July 2022 to Dr. Sriram Sundar, Assistant Professor, Department of Mechanical Engineering, IIT Tirupati at <a href="mailto:sriram@iittp.ac.in">sriram@iittp.ac.in</a>** 

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.