

IIITDM Kancheepuram

Call for Summer Research Internship Under Accelerate Vigyan - Vritika

“MATHEMATICAL THEORY OF SHOCKS IN SOLIDS”

About IIITDM Kancheepuram

IIITDM Kancheepuram, a centrally funded institute offers UG and PG programs in Computer, Electronics and Mechanical Engineering with the mandate of excelling in IT and IT enabled Design & Manufacturing pedagogy and research. B.Tech, M.Tech, Dual Degree courses specializing in VLSI, Systems Design, etc. and Ph.D programmes in core areas of engineering are offered by us. Curricula for these programmes augment engineering domain with relevant design & manufacturing skills. More details at www.iiitdm.ac.in

About VRITIKA Research Internship Scheme

VRITIKA' is the call for initiation and practice in science through Training and Skill Internship. This program aims to provide opportunities to promising PG students from universities and colleges to get exposure and hands-on research skill development experience. These internships will primarily be facilitated by organizations / institutions / laboratories of national importance. For further details visit the following links:

<https://acceleratevigyan.gov.in/programs/abhyas/vritika>

<http://serb.gov.in/abhyaas.php>

About the Internship Programme

Structures under impact and blast loads is a phenomenon encountered commonly in automotive, military and aerospace applications. Such dynamic phenomena involve propagation of shock waves in solids prior to fracture and fragmentation. It is necessary to understand the shock wave phenomena in solids. The scope of this internship is to develop mathematical models to describe the shock wave phenomena in soft materials, ductile materials, layered materials such as metal/polymer bilayers, ceramic composites, and sandwich panels. The focus will be on learning the software tools and mathematical techniques required to perform analysis of structures under dynamic loading conditions. At the end of the internship, the interns will be able to formulate a nonlinear solid mechanics problem involving large deformation and fragmentation and conduct research on dynamic behaviour of materials.

Internship Details:

- Duration : 15 Dec 2023 to 15 Feb 2023 (60 Days)
- Place of Internship : IIITDM Kancheepuram, Chennai-600127
- Number of Internships: 05
- Reporting Date for Selected Candidates: On or before 15th Dec 2023
- No Stipend will be provided for the Internship.
- Boarding, lodging expenses for the internship period and other contingency expenditures as approved under Vritika scheme will be provided.
- Certificate will be provided to the interns after the successful completion of the internship tenure.

Who can Apply?

- Regular PG-Level (pursuing M.Tech/M.E./MS/MSc/Dual Degree in MECH/AERO/CIVIL/METALL and related Disciplines) students who are currently pursuing their degree from Institutions within India. 4th year UG students may also be considered on case by case basis.

How to Apply?

- The candidate shall apply by filling out the given google form. <https://forms.gle/tKLtHFHyh2w4UJ2t9>
- Deadline for Application Submission: 10th December 2023
- Shortlisted candidates shall be intimated via email on or before 11th Dec 2023

Address for Correspondence:

Dr. Siva Prasad A V S

Assistant Professor,

Department of Mechanical Engineering

Indian Institute of Information Technology, Design & Manufacturing (IIITD&M Kancheepuram), Chennai-127

Email: avs@iiitdm.ac.in

Contact: 9849584611