

IIITDM Kancheepuram





Inviting Applications for Internship under Accelerate Vigyan - VRITIKA Scheme 2024

"Development of Novel Patterned Microfluidic Channel for Enhanced Mixing of Nanoparticles in Green Fluids"



About IIITDM Kancheepuram

IIITDM Kancheepuram is an Institute of National Importance established by the Ministry of Education, Government of India to pursue design and manufacturing-oriented engineering education and research. The Institute offers B.Tech., M.Tech., M.Des programmes, and PhD programmes in Engineering, Interdisciplinary Product Design, and core and applied areas of basic sciences Mathematics, and Physics. For more details, visit the following link: http://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. Visit http://serb.gov.in/abhyaas.php, and https://acceleratevigyan.gov.in/programs/abhyas/vritika for more details.

About the Internship Programme

The internship disseminates and strengthens initiatives in improving the mixing in the green fluids. The enhanced mixing technique achieved through the three-wall patterned microfluidic channel can revolutionize areas such as drug delivery, chemical synthesis, and biotechnology. The uniform dispersion of nano-particles can enhance the efficiency of drug delivery systems, improve the synthesis of advanced materials, and enable precise manipulation of biological samples. This internship will provide opportunities for potential future researchers to explore the application surface engineering to design and fabricate a three-wall patterned microfluidic channel for enhanced mixing of nano-particles in green fluids. Moreover, this internship will expose students to hands on microfabrication techniques, micro/bio-fluidics setup, detection and characterization instruments. It will also help them to understand their potential future research scopes in the field of micro-fluidics and nano-fluidics/ biomedical device design and development/ smart and sustainable manufacturing.

Internship Details:

Duration : 01 Aug 2024 to 30 Aug 2024 (30 Days)
Place of Internship : IIITDM Kancheepuram, Chennai-600127

> Number of Internships : 05

- ➤ **Reporting Date for Selected Candidates**: On or before 01st August 2024
- 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 students, UG final year students, Ph.D. scholar pursuing their degree from University/Institution within India.
- Intern should have basic knowledge of mechanical engineering/ product design/ biomedical devices/ biotechnology/ nanomaterials/ nanotechnology.
- Students interested to pursue research in the field of micro-fluidics and nano-fluidics/ biomedical device design and development/ smart and sustainable manufacturing.

How to Apply?

The candidate shall apply by filling out the given google form. Please fill this google form:

Link: https://forms.gle/PPMHnMUyXe7mV2rc9

Deadline for Application Submission: July 27, 2024

➤ Shortlisted candidates shall be intimated via email on or before 29th July, 2024

Event coordinator & contact details:

Dr. Avinash Kumar

Assistant Professor, Department of Mechanical Engineering

Smart Surface and Complex Flow Laboratory (L-506A)

Indian Institute of Information Technology, Design & Manufacturing (IIITDM Kancheepuram), Chennai.

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