

IIITDM Kancheepuram

Call for Summer Research Internship Under Accelerate Vigyan - Vritika

Emerging Catalytic Technologies for Conversion of CO₂ into Fuels (ECTCCF)

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

This internship programme focuses on newly emerging technologies in the field of computational catalysis, a field which has attracted immense attention lately, with main emphasis being density functional theory-based design and analysis of catalyst material for CO₂ reduction reaction. This training will enable the interns to learn the basics of density functional theory (DFT) calculations, to gain hands-on training on how to perform DFT calculations and how to interpret the results. The knowledge gained will help them to have an idea of computational materials design and investigating a material's properties, required for various applications. It will also help them to understand their potential future research scopes in the field of condensed matter physics/materials science.

Internship Details:

- **Duration:** 22nd May, 2023, to 20th July, 2023 (60 Days)
- **Place of Internship:** IIITDM Kancheepuram, Chennai-600127
- **Number of Internships:** 05
- **Reporting Date for Selected Candidates:** On or before 22nd May 2023
- Boarding, lodging expenses for the internship period and other contingency expenditures as approved under Vritika scheme will be provided. No Stipend will be provided for the Internship.
- Certificate will be provided to the interns after the successful completion of the internship tenure.

Who can Apply?

- Regular PG level students (M.Sc. in Physics/Chemistry/ Material Science/ Related disciplines/MS/M.Tech), Ph.D. scholar pursuing their degree from University/Institution within India.
- Intern should have basic knowledge of materials science/solid state physics.
- Students interested to pursue research in the field of Computational Material Science/Condensed Matter Physics and Sustainability.

How to Apply?

- The candidate shall apply by filling out the given google form. **Please fill this google form:**
Link: <https://forms.gle/MPMgXjANNUzWTdEWA>
- **Deadline for Application Submission:** **May 16, 2023**
- Shortlisted candidates shall be intimated via email on or before 19th May, 2023

Event coordinator & contact details:

Dr. Debolina Misra

Assistant Professor of Physics

Materials Modeling and Simulation Laboratory (L-508 B)

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

Email: debolinam@iiitdm.ac.in, debolinamisra@gmail.com

Internship at IIITDM Kancheepuram
(to be submitted by Students from outside IIITDM Kancheepuram)

1. Title of the event under which internship is sought at IIITDM Kancheepuram:

2. Period of the internship: From_____To_____No. of Days:

3. Student Details:
 - (a) Student's Name:
 - (b) Year of study:
 - (c) Name of Degree Programme:
 - (d) Roll/Registration Number:
 - (e) Department:
 - (f) Name of the Institute with Complete Address:

4. Stipend expected to be received by the student during this internship (if any):

I am interested to participate in the above mentioned event at IIITDM Kancheepuram and I certify that the information I have written on the application are true and accurate.

Signature of the Student

The student is permitted to join the internship, if selected at IIITDM Kancheepuram.

Head of the Institution

(Signature with Designation and Date)

INSTITUTE/UNIVERSITY/COLLEGE SEAL