



IIITDM Kancheepuram

Call for Summer Research Internship Under Accelerate Vigyan - Vritika

Hybrid supercapacitor electrodes based on binary transition metal oxide and reduced GO

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. For further details, visit the following links: <http://serb.gov.in/abhyaas.php> & <https://acceleratevigyan.gov.in/programs/abhyaas/vritika>

About the Internship Programme

The internship will focus on fabrication of hybrid supercapacitors (HSCs) for superior energy storage. Electrochemical energy storage devices including rechargeable metal-ion batteries and supercapacitors have received increasing attention because of their wide applications. In HSCs the main provoking feature intends towards the development of materials showing superior energy density in near approximation to batteries without altering their ingrained characteristic of high-power density along with long cycling life. To achieve that the development of highly porous and nano-sized electrode material to enhance the capacitance is one of the efficient methods. The aim of this internship is to provide students hands-on-experience in synthesis and characterization of electrode materials for HSCs and device fabrication.

Internship Details:

- **Duration:** May 15, 2023 to July 13, 2023 (60 Days)
- **Place of Internship:** IIITDM Kancheepuram, Chennai-600127
- **Number of Internships:** 05
- **Reporting Date for Selected Candidates:** On or before 15th 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?

- PG level (M.Sc. in Physics or Chemistry/ Related disciplines) students, Ph.D. scholar (up to 2nd year), pursuing their degree from University / Institution within India.
- Intern should have basic knowledge of materials science.
- Students interested to pursue research in the field of Material Science and Energy.

How to Apply?

- The candidate shall apply by filling out the given google form. **Please fill this google form:**
Link: <https://forms.gle/Y8Yh8qXqvKWuJQYy9>
- **Deadline for Application Submission: May 9, 2023**
- Shortlisted candidates shall be intimated via email on or before May 11, 2023

Address for Correspondence:

Dr. Vivek Kumar

Assistant Professor, Physics

Applied Nanomaterials and Energy Laboratory

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

Email: vivek@iiitdm.ac.in, Contact: 044-2747-6388/ 8840694491

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