



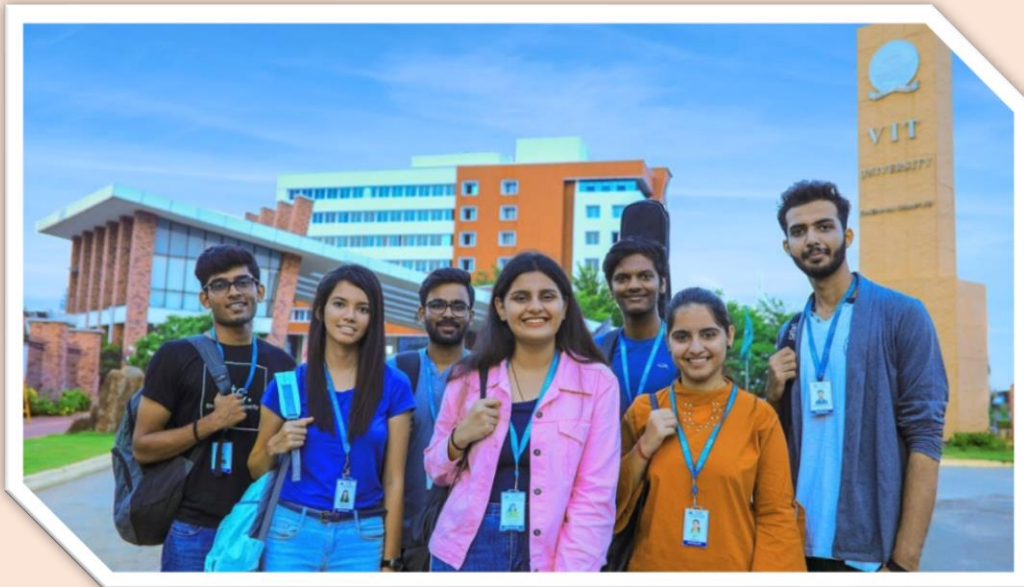
VIT[®]

Vellore Institute of Technology
(Deemed to be University under section 3 of UGC Act, 1956)
CHENNAI

Centre for Innovation and Product Development (CIPD)

International Research

Internship Call 2024



Chennai, India

May- November 2024



VIT[®]

Vellore Institute of Technology

(Deemed to be University under section 3 of UGC Act, 1956)
CHENNAI

CIPD



International Research Internship Program 2024

Internship Theme: **Product Development for Sustainable Future**

- ✦ Biodegradable Composites: Exploring the Potential of Natural Fibers in Eco-Friendly Product Manufacturing.
- ✦ Sustainable Packaging Solutions: Utilizing Natural Fiber Composites for Reduced Environmental Impact.
- ✦ The Role of Agricultural Waste in Enhancing the Properties of Natural Fiber-Reinforced Composites.
- ✦ Renewable Resources and Product Innovation: The Application of Natural Fiber Composites in Industry.
- ✦ Controlled radical polymerization, Continuous flow photo polymerization, Biodegradable packaging materials, AI technique for Soil analysis, Nanosensors Fabrication for Biomarkers Identification
- ✦ 3D Printed membrane development and Multifunctional Materials, New materials and devices for neuromorphic computing, Printed sensors for biomarker detection, Electrochemical sensors with polymer composites, Nanoscale device modeling and simulation, Machine Learning for nanoscale devices/sensors
- ✦ Development of heavy metal ion sensors for water quality monitoring
- ✦ Development of glass micromachined micro-thrusters for micro-/nano-/pico- satellites propulsion
- ✦ Development of electrochemical sensors for biosensing applications (detection of various analytes including cancer biomarkers), VLSI circuit design using CADENCE, Development of polymer- and textile-based sensors
- ✦ Applications of Machine Learning, Deep Learning, and Artificial Intelligence for innovative process and product development (VLSI Design and Sensors)
- ✦ Prediction of aerodynamic coefficients on bridge decks/buildings/airfoils / wings using Machine Learning
- ✦ Fatigue estimation of cables under wind induced vibration
- ✦ Wind tunnel investigations on morphing wings, Exploring Aeroacoustics of Different Automotive Parts through Experiment
- ✦ Experimental Investigations into Bridge Flutter using recurrence network analysis
- ✦ Design and development of flow testing facility for UAV's and special vehicles.



Join our CIPD Team!

- ✚ Connect with like-minded individuals, industry experts, and professionals.
- ✚ Gain hands-on experience with the latest tools and technologies in product development.
- ✚ Utilize state-of-the-art facilities, labs, and equipment dedicated to research and development.

We are Experts from Centre for Innovation and Product Development (CIPD) committed to innovation and excellence. We're looking for talented and motivated interns to join our CIPD team.

What You'll Do

- ✚ Collaborate with students from different academic backgrounds, such as engineering, design, business, and science, to develop a well-rounded approach to product development.
- ✚ Utilize design thinking and rapid prototyping tools to turn ideas into tangible models.

What We are looking for

- ✚ Strong interpersonal and communication skills to facilitate teamwork and idea exchange.
- ✚ Acquiring new technical skills relevant to product development and innovation.
- ✚ Analyse problems, conduct research, and apply findings to design and development processes.

Why Should you Join Us

- ✚ Collaborate with individuals from various fields, broadening your perspective and enriching your problem-solving skills.
- ✚ Participate in projects with the potential to bring about significant positive changes in society.

How to Apply

To apply for our internship opportunities, we encourage you to explore the expertise of our faculty and the areas of research that align with your interests. Once you identify mutual areas of interest, you can make a direct request to the faculty for the availability of internship offers.

All applications should be submitted via email. Please use this email to submit the application form: inboundexchange@vit.ac.in. We look forward to receiving your application and exploring the possibility of working together on exciting projects!



VIT
Vellore Institute of Technology
(Deemed to be University under section 3 of UGC Act, 1956)
CHENNAI

Centre for Innovation and Product Development

Research Internship Program 2024- CIPD Faculty

Dr. G. Venkatachalam

Professor & Director, CIPD

g.venkatachalam@vit.ac.in

Research Expertise

- ✚ New material and product development
- ✚ Natural fiber composites
- ✚ Applications of finite element methods (FEM)



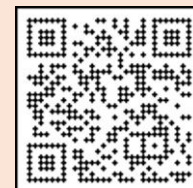
Dr. Ravi Sankar A

Professor, CIPD

ravisankar.a@vit.ac.in

Research Expertise

- ✚ Microsystems development for space- and bio-applications
- ✚ Micro-/Nano- materials
- ✚ Facile fabrication processes
- ✚ Cost-effective sensors



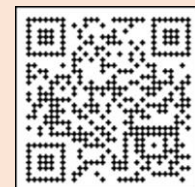
Dr. Rajendra Kumar K

Associate Professor, CIPD

rajendrakumar.k@vit.ac.in

Research Expertise

- ✚ Synthetic Polymer Chemistry
- ✚ Polymer coatings
- ✚ Packaging & Wound dressing materials





VIT

Vellore Institute of Technology

(Deemed to be University under section 3 of UGC Act, 1956)
CHENNAI

Centre for Innovation and Product Development

Research Internship Program 2024- CIPD Faculty

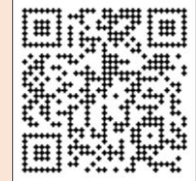
Dr. G. Vinayagamurthy

Associate Professor, CIPD

vinayagamurthy.g@vit.ac.in

Research Expertise

- ✚ Aerodynamics
- ✚ Wind Engineering
- ✚ Structural Dynamics
- ✚ Vibrations and Fluid dynamics



Dr. E. Manikandan

Assistant Professor (Senior), CIPD

manikandan.e@vit.ac.in

Research Expertise

- ✚ Micromachining
- ✚ Metamaterials
- ✚ Terahertz
- ✚ Imaging Techniques.



Dr. G. Lakshmi Priya

Assistant Professor (Senior), CIPD

lakshmipriya.g@vit.ac.in

Research Expertise

- ✚ Sensor Technology
- ✚ Novel materials for Printed & Flexible Devices
- ✚ Nanoscale Device Modeling



Apply Now via Email !

Internship Period
MAY-NOV 2024

Along with this Intern students will have a chance to learn Foundation course in English, Indian Culture & Heritage and Yoga. 100 % Scholarships for both Intern & Courses.

inboundexchange@vit.ac.in

Application Deadline: April 30, 2024

Convener

Dr Venkatachalam G, Director, Centre for Innovation and Product Development, , VIT Chennai, dircc.cipd@vit.ac.in

Co-Conveners

Dr Syd Ibrahim S P, Deputy Director, International Relations, VIT Chennai, ir4@vit.ac.in

Dr Nithya Venkatesan, Assistant Director, International Relations, VIT Chennai, ir5@vit.ac.in



[development/](https://chennai.vit.ac.in/research/research-centre/centre-for-innovation-and-product-development/)

[https://chennai.vit.ac.in/research/research-centre/centre-for-innovation-and-product-](https://chennai.vit.ac.in/research/research-centre/centre-for-innovation-and-product-development/)