



THAPAR INSTITUTE
OF ENGINEERING & TECHNOLOGY
(Deemed to be University)

INVITING APPLICATIONS FOR JRF POSITION

Embrace Excellence



A platform for the new materials age

Join world-class research groups at CEEMS (Center of Excellence in Emerging Materials), TIET

About Thapar Institute of Engineering and Technology

Thapar Institute of Engineering and Technology (TIET), one of India's premier Institutions for higher education, provides world-class education and cutting-edge research in Engineering and Sciences. It is ranked 20th, 22nd, and 34th in the Engineering, University, and Research categories respectively by NIRF in 2023. NAAC ranking is A+

What CEEMS offers you?

CEEMS provides a platform for postgraduate students (M.Sc., MTech, Ph.D.), and post-doctoral candidates to have opportunities to conduct research under the supervision of leading publish their research in peer-reviewed journals and networking opportunities with other students, faculty, and industry professionals

Emoluments and Tenure

Rs. 35,000 pm with NET/GATE/Equivalent + Contingency*#

Rs. 25,000 pm without NET/GATE/ Equivalent + Contingency*#

Tenure: 3 years (subject to annual performance review)*

* as per CEEMS-TIET norms

The candidate is expected to work with his/her supervising faculty on the project and is also required to register and **pursue a Ph.D. in the related department.**

Applications are invited for the following project titled:

| S.No. | Area | Title of the project | Essential Qualification | Contact Email |
|-------|------|---|--|--|
| 1 | CGX | Performance Evaluation of CNF and Graphene Reinforced Hybrid Glass/Carbon Fiber Epoxy Nano-Composite for Improved Ballistic Resistance. | M.E. / M. Tech. in Civil/ Mechanical/ Chemical/ Relevant | shrutisharma.ced@thapar.edu |
| 2 | SC | Development of Sustainable Pavement Preservation Materials with Carbonaceous Chars as Alternative Fillers. | M.E./ M. Tech. in Civil/ Mechanical/ Chemical/ Relevant | abhinay.kumar@thapar.edu |
| 3 | CDT | Automated CAD System Utilizing Deep Learning Models for Identifying Multiple Sclerosis Brain Lesions. | M.E./ M. Tech. in Electrical/ Chemical/ Computer/ Relevant | ashima@thapar.edu |
| 4 | CDT | NFC-RFID sensor based smart bandage for real-time monitoring of wound health. | M.E./ M. Tech. in Electrical/ Chemical/ Computer/ Electronics & communication Relevant | jaswinder.kaur@thapar.edu |
| 5 | CDT | Development of a wearable, noninvasive, personalized home detection kit for early detection of breast cancer. | M.Sc. or M. Tech. Biotechnology/ Life Sciences / Zoology/ Biochemistry/ Chemistry | diptiman@thapar.edu |
| 6 | CDT | Experimental and computational investigation towards the synthesis of novel indole-based scaffolds and their biological evaluation | M.Sc. in Chemistry | vikas.tyagi@thapar.edu |
| 7 | S3 | Synthesis of Novel Mechano-fluorophores for pressure-sensing and their potential applications in concrete structures. | M.Sc. in Chemistry | vluxami@thapar.edu |

About Center of Excellence in Emerging Materials

CEEMS is an interdisciplinary center that was established in 2019 under a collaborative venture between TIET, India, and Virginia Tech, USA. This center has been designed to bring together research groups from different disciplines to conduct advanced scientific and engineering research in a new generation of materials, with an emphasis on solving significant problems facing humanity. Current areas of research include **Coal-derived Graphene-x (CGX), Sustainable Construction (SC), Cancer Detection and Treatment (CDT), and Smart Sustainable Sensors (S3).**

For more information please visit <https://ceems.thapar.edu/>

Qualification

1. First class in **M.Sc./ M. Tech.** in the relevant field. (**Essential**) or **B. Tech.** with an **8 CGPA** in the relevant field with a valid **GATE** score.
2. Candidate with valid **NET/ GATE/ Equivalent** will get preference
3. Proven **research experience** in the relevant field will be preferred.

Application procedure and deadline

Only **online applications (to the respective email)** will be accepted.

The last date for submitting a complete application is **02/10/2023**

A separate application is needed to apply in multiple projects.

Link for the Application: [Click here](#)

For any query, contact Coordinator CEEMS, Prof. Rajeev Mehta, TIET (Email: coordinator.ceems@thapar.edu) or CEEMS Chair Professor, Dr. Roop L. Mahajan, Lewis A. Hester Chair Professor, Virginia Tech., USA (Email: mahajanr@vt.edu).