

TIET-VT Centre of Excellence in Emerging Materials (CEEMS) Advertisement for the Post of Post-Doctoral Fellow (PDF) in CEEMS

Application Deadline: 29.12.2025

Sponsor	TIET-VT Centre of Excellence in Emerging Materials (CEEMS)
Project Title	<i>Synergetic effect of MXene and Zircon in carbon fiber reinforced epoxy nanocomposites for superior mechanical properties and tribological performance</i>
Project Description	This project aims to develop self-lubricating and highly wear-resistant CFRP nanocomposites by synergistically combining indigenously synthesized MXene nanoplatelets, low-cost zircon micro-fillers, and carbon fiber reinforcement in an epoxy matrix. The proposed materials will exhibit low friction, enhanced mechanical strength, and superior dry sliding wear performance, addressing the limitations of conventional steel and ceramic slide bearings. Advanced surface modification, mechanical, tribological testing and microstructural characterization will establish structure–property relationships. The outcomes are expected to deliver cost-effective, durable, and environmentally sustainable materials for hydraulic pumps and other high-performance engineering applications.
Investigators	Dr. Gautam Setia, Assistant Professor, Department of Mechanical Engineering, TIET. Dr. Tarun Nanda, Professor, Department of Mechanical Engineering, TIET. Dr. Rajeev Mehta, Professor, Chemical Engineering Department, TIET. Dr. Anuj Bansal, Assistant Professor, Department of Mechanical Engineering, SLIET Longowal.
Position available	Post-Doctoral Fellow (PDF) [01 No.]
Qualification	Ph.D. in the field of materials engineering and technology (especially composite/ceramic materials/2D Materials with a minimum of 02 research papers in SCI journals in relevant areas).
Position Duration	01 year, extendable till 03 years
Emoluments	Rs. 60,000/- per month
Application procedure and deadline	Applicants should email the following to Dr. Gautam Setia at gautam.setia@thapar.edu , tarunnanda@thapar.edu : <ol style="list-style-type: none"> 1. Applicant’s Resume (Bio-data) 2. Degree Certificates (Ph.D., PG, UG) 3. Two research papers in SCI journals in the area of polymer composite/ceramic materials/2D materials <p>Note:</p> <ul style="list-style-type: none"> • Candidates to scan the above documents and combine them in a single PDF file. • Deadline for application: 29th December, 2025. • Only shortlisted candidates will be called for interview. • Schedule of on-line/off-line interview for short-listed candidates will be communicated. • No TA/DA will be provided to attend the interview if asked to appear in off-line mode. • Expected date of joining: 1st week of January 2026.

Contact: Dr. Gautam Setia, Email: gautam.setia@thapar.edu, M: 8437760248

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