Thapar Institute of Engineering and Technology, Patiala
(Deemed-to-be-University u/s 3 of the UGC Act, 1956)

DEPARTMENT OF CHEMICAL ENGINEERING

March 28, 2025

ADVERTISEMENT FOR JUNIOR RESEARCH FELLOW IN DASSAULT SYSTEMES FOUNDATION SPONSORED PROJECT

DSF Contract ID: 2025-2080

Project Title: Upcycling Textile Waste into Sustainable and High Impact Strength GFRP Nanocomposites

Position: Junior Research Fellow (JRF)

Duration: 12 months (initially)

Stipend: Rs. 41000/- per month in total

- **About the project:** This research aims to develop advanced GFRP nanocomposites by using recycled spandex fibers as a micro-filler, silicate platelets as nano-filler and glass fibers as macro-fillers for improved impact strength of GFRPs. The study focuses on cost-effective, high-performance composites, potentially leading to patentable innovations. Outcomes include scholarly articles and a detailed report. Ultimately, this research seeks to revolutionize GFRP processing, enhancing the composite performance, and contributing significantly to high impact applications.

Qualifications:

Essential: M.E./M.Tech. in Chemical Engineering/Mechanical Engineering/CAD/CAM Engineering/Production Engineering or other relevant disciplines.

Desirable: This project requires expertise in materials science, composites manufacturing, mechanical testing, and metallurgical analysis, along with proficiency in CAD/FEM simulations.

Last date of application: April 06, 2025

How to Apply:

1. Interested candidates are requested to submit a detailed CV through email (with the subject as "Project Vacancy for Upcycling Textile Waste into Sustainable and High Impact Strength GFRP Nanocomposites") to the PI (**rmehta@thapar.edu**) before the last date. A copy of email may also be forwarded to tarunnanda@thapar.edu.
2. Shortlisted candidates will be intimated for the online interview by email only.
3. The candidate selected for the above position may also get enrolled for Ph.D. degree simultaneously as per the Institute norms.
4. In case of any query related to the above project, kindly email to **Dr. Tarun Nanda** (94635-86083) or **Dr. Gautam Setia** (84377-60248).

Dr. Rajeev Mehta (PI), Dr. Tarun Nanda (Co-PI) & Dr. Gautam Setia (Co-PI),
Thapar Institute of Engineering and Technology, Patiala