

Dr. Dinesh Kalyanasundaram
Associate Professor
Center of Biomedical Engineering

Areas of Interest-

Medical device Design (Orthopedics, ENT, Ocular devices, DNA based diagnostics etc.)

Development of manufacturing processes (laser machining, sintering, injection molding etc.)



Dr. R. Alagirusamy Professor

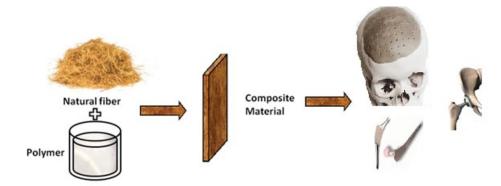
Areas of Interest-

Innovative materials for textile applications, Electrospun Nano fibers.

Specialization-

- Hybrid Yarn for Composites
- Natural Fiber Composites
- > Textile perfoming for composites

Department of Textile & Fiber Engineering





Chetan Kumar Garg
M.Tech, Chemical Engineering (IIT Roorkee)
Email- chetan.kumar.garg@sire.iitd.ac.in

Title – Manufacturing of Thermoplastic composites for Biomedical Applications

- Recently, the use of petroleum based or synthetic products decreased due to higher concern of researchers on green materials like-bio-materials, as an alternative of synthetic material. The increasing demand of bio-based products, bio-materials attracting researchers due to their low cost, eco-friendly etc. for further use in biomedical field such as drug delivery, tissue engineering, in the form of implants (bone plates, dental implants, ligaments, joint replacements, sutures, heart valve etc) and devices used in medical field (biosensors, pacemakers, artificial heart etc)
- Here we are interested to develop thermoplastic composites by various manufacturing process techniques to improve their strength as thermoplastic composite suffers from low strength. And these composites will further tested for biomedical applications such as drug delivery, tissue engineering, in the form of implants (bone plates, dental implants, ligaments, joint replacements, sutures, heart valve etc.)

School of Interdisciplinary Research, IIT Delhi