Nonwoven Technology and Recent Developments

21st to 25th December, 2020

Overview

Nonwoven fabrics are one of the several techniques used in the manufacture of fabrics; the others being weaving, knitting and braiding. However nonwoven fabric manufacturing process is the shortest route to manufacture fabrics, directly from fibres or polymers and the speeds of manufacturing are very high, which may correspond to paper manufacturing in some cases. Therefore, the cost of manufacturing nonwoven fabrics is very low as compared to woven and knitted fabrics. Moreover, different fabric structures can be produced for different applications ranging from the lofty waddings or insulations to stiff compact fabrics for reinforcement or fibrillated structures for application as barrier to water/liquids and in filtration or waterproof fabrics. This course will provide a fundamental understanding of Nonwoven technology, nonwoven manufacturing processes and characterization techniques. Recent developments and future opportunities and trends will also be covered. Challenges with growth of nonwovens as well as product design and development for sustainability will be discussed.

Objectives

The primary objectives of the course are as follows:

1. Emphasize the role of nonwoven fabric manufacturing in the field of textiles.
2. Demonstrate the significance of nonwoven products in different applications.
3. Provide exposure to the participants regarding various techniques of manufacturing nonwoven fabrics and their developments.
4. Awareness regarding the potential of nonwovens, market growth and product designs.

Course duration	**21st to 25th December, 2020**
Who can attend…	• Executives, engineers and researchers from academia, industry and government organizations including R&D Laboratories with a background in textile technology/fibre science • Postgraduate students (M Tech/PhD) and faculty from reputed academic institutions and technical institutions
Fees	The participation fee for taking the course would be: Academic institutions : **Rs. 2000** Students **:** **Rs. 1000** Industry : **Rs. 2500** Participants from abroad: **$ 100** Fee includes the instructional materials, internet facility and snacks. The accommodation will be provided on payment basis.

The Faculty

Professor Gajanan Bhat did his B Tech in Textiles from Bangalore University, M Tech in Fiber Science and Technology from IIT Delhi in 1984 and M.S in Textile Engineering from Georgia Institute of Technology, Atlanta, GA in 1987. After earning his PhD in Textile and Polymer Science from Georgia Tech, Atlanta, USA in the year 1990, he joined the University of Tennessee, Knoxville, where his research covered nonwovens- melt blown, spunbonded and biodegradables, plastic recycling, nanotechnology, sustainable materials and high performance fibers. As the director of Nonwoven Research Laboratory, he has focused on production of nanofibers from thermoplastic polymers by meltblowing. At present, he is Department Head, Textiles Merchandising & Interiors and Georgia Athletic Association, Professor of Fibers and Textiles, University of Georgia, Atlanta (USA). He is involved in conducting research in various areas of fibers and textiles. As the Academic Head of the Department with 15 faculty and 300 students, is responsible for all aspects of the department's day-to-day administration and planning for success and growth. He has published 106 papers in referred journals/books, and 150 papers in international conferences, and has five US patents to his credit. He has served as the president of Fiber Society and is also an active member of INDA, TAPPI and the Textile Institute. He is recipient of several awards; the most recent being the TAPPI NET division Technical Achievement Award.

Prof Vinay Midha did his B Tech in Textile Technology from Dr B R Ambedkar REC Jalandhar, M Tech and Phd in Textile Technology from IIT Delhi. He has more than 25 years of experience in academics and research. At present, he is Professor and head of the department of Textile Technology at Dr B R Ambedkar National Institute of Technology Jalandhar (India). His areas of interest include, nonwovens, geotextiles and sewing thread/garment interaction. He has contributed more than 50 research papers in referred journals and 50 research papers in International Conferences. He has contributed seven book chapters published by Woodhead Publications and CRC press. He has applied for three Indian Patents and is recipient of awards from the Institution of Engineers, TBIS and Dr B R Ambedkar NIT Jalandhar. He is a member of the Textile Institute, Manchester, Institution of Engineers (India) and Indian Society for Technical Education.

Course Co-ordinator

Dr Vinay Midha
Professor & Head, Department of Textile Technology, Dr B R Ambedkar NIT Jalandhar
Email: midhav@nitj.ac.in,
Phone: 9815948608

.....

http://www.gian.iitkgp.ac.in/GREGN