

# Joining Textiles

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## Overview

Methods of joining various components of fabrics for converting them into three dimensional garment structures have been in practice for longer than the fibre based textiles have been available. Sewing needles have been in use since Stone Age, even before the invention of woven fabrics. Further developments into the use of textile materials led to the introduction of sewing machines in 17<sup>th</sup> century. Revolution in this sector took place with the invention of high speed lockstitch, chainstitch and overlock stitching machines for domestic and industrial applications, besides the intelligent sewing machines now a days, which can set up themselves and dynamically control their mechanism. With a range of fabric types and demands for seams in different applications, range of methods available for making seams in textiles is increasing. New joining techniques including heat sealing, dielectric welding, ultrasonic welding and laser welding, increase the flexibility of the garment designers for incorporating different materials and components like laminates. The application and use of fabrics in technical textile applications like medical dressings, waterproof breathable garments, protective fabrics and industrial textiles require the use of new joining methods, which can provide the same performance and productivity without adversely affecting their functions. This course actually would target towards discussing the various new techniques of joining textile materials, advancements in sewing, intelligent sewing machines and their applications in technical textiles.

## Objectives

The primary objectives of the course are as follows:

1. Emphasize the role of seaming in converting the 2-d fabric into 3-d garment
2. Providing exposure to the use of various techniques of joining textiles for different applications
3. Awareness regarding intelligent sewing machines and integrated stitching units

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| <b>Course duration</b>   | <b>20<sup>th</sup> to 24<sup>th</sup> March, 2017</b>  |
| <b>Who can attend...</b> | The course would be beneficial for garment manufactures, production engineers, designers and researchers working with different components of textiles or their combination with different materials including: <ul style="list-style-type: none"><li>• Textile Technologists</li><li>• Garment Technologist</li><li>• Sewing thread manufacturers</li><li>• Students or faculty from academic institutions</li><li>• Industry/Research organization</li></ul> |
| <b>Fees</b>              | The participation fee for taking the course would be:<br>Academic institutions : <b>Rs. 2000</b><br>Students : <b>Rs. 1000</b><br>Industry : <b>Rs. 2500</b><br>Participants from abroad: <b>\$ 100</b><br>Fee includes the instructional materials, internet facility and snacks. The accommodation will be provided on payment basis.  |

## The Faculty



**George K Stylios** is a distinguished professor in the School of Textiles & Design at Heriott Watt University, Edinburg, United Kingdom. He comes from a textile business background in Greece and studied in the UK. He completed his postgraduate studies in Leeds and then went onto his MSc and PhD,

which were funded by M&S and their suppliers. George completed his PhD in 1986 and became a lecturer in clothing at Bradford, and he became a fellow of the Science and Technology Agency in Japan in 1991 before returning to Bradford in 1992. of research programmes in the past funded by companies and government funding agencies as evidenced by the fact that he has so far authored 167 research papers that include 4 books, 16 monographs, 16 book chapters & 9 patents. His books on 'Development in Medical Textiles' & 'Advanced Textiles for Wound Care' received great attention among readers. In addition to academic activities, Professor Rajendran is actively involved in Textile Institute's affairs for many years. He is currently Chairman of Professional Qualifications Award Committee & a member of the Board & the Governing Council of the Textile Institute, Manchester. He is the recipient of a prestigious Research Fellowship award from the United Nations Industrial Development Organisation (UNIDO).



**Dr Vinay Midha** is Associate Professor in the Department of Textile Technology at Dr B R Ambedkar National Institute of Technology, Jalandhar (India). He has contributed more than 50 research papers in International & National journals and Conferences and has written three chapters in books published by Woodhead Publications.



**Dr A Mukhopadhyay** is Professor in the Department of Textile Technology at Dr B R Ambedkar National Institute of Technology, Jalandhar (India). He has contributed more than 160 research publications in reputed academic and applied journals, conference proceedings etc. and 8 monographs/book chapters.



**Dr A K Choudhary** is Associate Professor in the Department of Textile Technology at Dr B R Ambedkar National Institute of Technology, Jalandhar (India). He has contributed more than 45 research papers in International & National journals and Conferences, patents and reports.

## Course Co-ordinators

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