How to reach CSWRI, Avikanagar - CSWRI, Avikanagar is situated about 90 km from Jaipur city. The campus is accessible through road either by Rajasthan State Roadways bus service or by hired taxi. It is located 8 km after Diggi and 5 km before Malpura town on state highway No SH12.

Course Fee

- Student- Rs. 2500/- per person + 18% GST
- Faculty member- Rs. 5000/- per person + 18% GST

The payment may be made by DD in favour of ICAR unit CSWRI Avikanagar or by NEFT

State Bank of India, Malpura (A/c no-51066000084,

IFSC Code- SBIN0031088)

Boarding and lodging will be arranged by the organization on payment basis. All interested participants are requested to give the following details by email to **seiko_jose2005@yahoo.co.in** latest by 10.07.2018. Confirmation of participation will be intimated by 13.07.2018.

- Name :
- Organisation name and address:
- Educational qualification:
- Phone no and Email id:
- Module Name :

Organising committee

Patron

Dr. Arun Kumar Tomar

Director, ICAR-CSWRI, Avikanagar

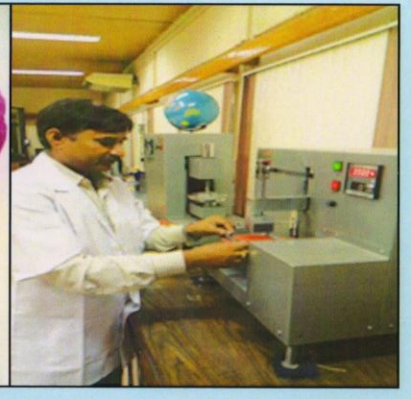
Dr. D. B. Shakyawar, Principal Scientist	Course Director
Dr. V.V. Kadam, Scientist	Course coordinator
Mr. Seiko Jose, Scientist	Course coordinator

Contact details:

E mail : dbshakya_67@yahoo.co.in, vinod.Kadam@icar.gov.in

Mobile: 8420075513, 6377589466

Basic Research Tools in Textile Testing and Textile Chemistry



First module (Textile Testing): 31.07.2018 – 10.08.2018

Second module (Textile Chemistry): 13.08.2018 – 24.08.2018

Organised by

Textile Manufacture and Textile Chemistry Division,

ICAR – Central Sheep and Wool Research Institute

(CSWRI), Avikanagar, Rajasthan - 304501

Textile Manufacture and Textile Chemistry Division

The Division of Textile Manufacture and Textile Chemistry has been the part of ICAR - Central Sheep and Wool Research Institute since its inception in 1962. The mandate of the Division is to carryout basic and applied research on various aspects of wool and other animal fibres. The main thrust areas are fibre characterization and evaluation, grading of wool, scouring, spinning, weaving, chemical and mechanical finishing and product development. A fully fledged wool processing plant is operational in the division since 1968. A well equipped textile laboratory for performing physical and chemical testing of all kinds of wool and animal fibres, yarn, fabric and carpets is functioning. The division has developed high quality blankets, angora-wool blended shawls and value added pashmina shawls. Optimum wool blends for hand knotted as well as handloom woven carpets being developed for home furnishing end uses. Handicrafts from Namda have been produced using indigenous wool and trainings are rendered to rural women and artisans. The recent divisional research activities include utilisation of Indian coarse wool for value addition, natural dyeing, woollen composites and nano technology. The division has signed MOU with Banasthali Vidyapith, UPTTI, Kanpur, The IIS University, Jaipur, Punjab Technological University, Jalandhar for collaborative research work to provide technical guidance to research scholars for pursuing their PG and PhD degree.

About the programme

The division is organising 21 days training programme on "Basic Research Tools in Textile Testing and Textile Chemistry" for M.Sc/M.Tech, Ph.D students and faculty members of Textile and Home Science disciplines in two modules. The first module will be organized from 31.07.2018 to 10.08.2018. The second module will be started from 13.08.2018 to 24.08.2018. The aim of this training is to refresh students and faculty members for carrying out textile testing and textile chemistry experiments. The training will be helpful for trainees to perform the research in a much systematic manner.

First module covers physical and mechanical testing of fibre, yarn and fabric. The second module contains pre-treatment, dyeing and finishing of textiles. The training also includes the topics like research methodology and methods for writing quality research papers in referred journals. An exposure visit to industries is also included during the training. The candidates are free to choose any one of the module or both together.

Facilities

- Scientific and technical expertise in Textile Technology and Chemistry
- Physical testing and chemical lab with sophisticated instruments
- Hands on training for individual participants
- Transport facility for exposure visit to participants

Course Content

Textile Testing	*Textile Chemistry*
Fibre diameter analysis	Pre-treatment of cotton
Bundle strength of fibre	Pre-treatment of wool
Single fibre strength	Analysis of dyeing water quality
Fibre length and crimp	Dyeing of wool/silk with acid and metal complex dyes
Scouring yield	Dyeing of cotton with reactive dyes
Yarn twist and tenacity	Industrial methods of dyeing
Yarn count	Shade matching in textiles
Analysis of EPI, PPI, GSM and thickness of fabric	Pad dry, pad batch and microwave dyeing
Blend analysis	Computer colour matching of textiles
Tensile strength of fabric	Dye uptake using photo colorimeter
Bending length of fabric	UV Vis analysis
Abrasion resistance of fabric	Analysis of colour fastness
Thermal resistance of blankets	Softener finishing
Pilling resistance	Aroma finishing of textiles
Bursting strength of fabric	Fire retardant finishing of textiles
FTIR analysis	Antimoth finishing of woollens
Drape of fabric	Nano Water repellent finishing
Static and dynamic friction of fabric	Eco friendly synthesis of Nano materials