Registration Fee

For students Rs.4000/- and for faculty and entrepreneurs – Rs.6000/- for each training module of 10 days.

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

All interested participants requested to give intimation by email to **seiko_jose2005@yahoo.co.in** latest by **03.07.2019**. Confirmation of participation will be intimated by **04.07.2019**.

How to reach CSWRI, Avikanagar

Location: CSWRI, Avikanagar is situating about 90 km from Jaipur city. The Campus is accessible through road only either by Rajasthan State Roadways bus service or by hired taxi service. It is located 8 km after Diggi and 5 km before Malpura town on state high way No SH12.

Organising committee

Patron

- Dr. A. Sahoo, Director, ICAR-CSWRI, Avikanagar
- Dr. D.B. Shakyawar, (Program Director)
- **Dr. V. V. Kadam**, (Program coordinator)
- Mr. Seiko Jose (Program coordinator)

Contact

TMTC Division, ICAR - Central Sheep and Wool Research Institute, Avikanagar, Rajasthan - 304501 Off: 01437-220179, Mob:8420075513



Training Program on Quality Control and Wet Processing of Textiles





Organised by Textile Manufacturing and Textile Chemistry Division Under Career advancement and faculty improvement program on Sheep production and Utilisation ICAR-CentralSheep and Wool Research Institute(CSWRI) Avikanagar, Rajasthan-304501

Textile Manufacturing and Textile Chemistry Division

The Textile Manufacturing and Textile Chemistry Division was established since the beginning of Central Sheep and Wool Research Institute at Avikanagar, Rajasthan in 1962. The Division does basic and applied research on various aspects of sheep wool along with other animal fibres. The core area of research interests includes blending, spinning and weaving, quality evaluation, natural dyes, woollen composites, nano technology and product development. The Division has significantly contributed in the product development like blanket, carpet, shawl, namdha and technical felt out of indigenous wool. Currently the Division has six scientists in the field of textile manufacturing and textile chemistry, supported by six technical staffs to perform the various research activities. The Division provides almost all basic testing facilities for carpet, blanket and other woollen products at affordable rates to research scholars and industries. The technical training programs related to Textile Testing, Textile Chemistry, Natural dyeing in addition to the skill development program for artisan are being counducted in every year. About 50 candidates from universities and industries were participated in various technical trainings conducted in the year 2018-2019. The Division also involved in the trainings supported by Central Wool Development Board for enhancing the livelihood of the rural women and extend its hands to consultation services to various industries and NGOs. The testing lab in the Division is well furnished with equipment facilities like glossmetre, yarn and fabric tensile strength testers, carpet testing facilities, fibre diameter analysis, abrasion, pilling, drape, etc. The chemistry lab is equipped with modern analytical instruments like FTIR, UV Vis spectometre and Infrared dyeing machine. Recently the lab is equipped with HTHP sample dyeing machine, high speed centrifuge and computer colour matching system. In addition to this, 7 research scholars are currently doing their post graduate and doctoral research work in the Division.

About the Training Programme

The TMTC Division is organising 21 days training programme on Textile Testing and Textile chemistry from 10.07.2019 to 30.07.2019. The first module on Textile Testing will start from 10.07.2019 to 20.07.2019. The second module is starting from 20.07.2019 to 30.07.2019. The candidate may attend any one module or both modules, according to requirement. The aim of the training program is to provide hands-on exposure to research scholars and faculty members about about research tools which enables to make them independent researchers. The basic theory behind each practical will be clarified through various technical sessions. The training also includes the topic likes nano technology, methods for writing quality research papers, along with industrial exposure. Students, research scholars, faculty members and entrepreneurs are cordially invited to participate in the program.

Course content

Textile Testing (10 days)

Fibre diameter, Bundle strength of fibre, Fibre length and crimp, Scouring yield, Twist, yarn count systems and their conversions, Tenacity, Fabric construction parameters, Blend analysis, Tensile strength, Bending length and flexural rigidity, Fabric thickness and Abrasion resistance, Thermal resistance of blankets, Pilling resistance, Bursting test, Static and dynamic friction, FTIR and UV Vis spectrometry, Fabric drape and Statistical analysis.

Textile Chemistry (10 days)

Pre-treatment of fabric, Dyeing of wool/silk with acid and metal complex dyes, Dyeing of cotton with reactive dyes, Natural dyeing and herbal finishing, Industrial methods of dyeing using combination of dyes and shade matching, Pad dry, pad batch and microwave dyeing, Computer colour matching of textiles, Dye uptake using photo calorimeter, UV Vis and FTIR analysis, Fastness to washing, rubbing and sunlight, Softener finishing, Antimoth finishing of woollens, Eco friendly synthesis of nano materials.