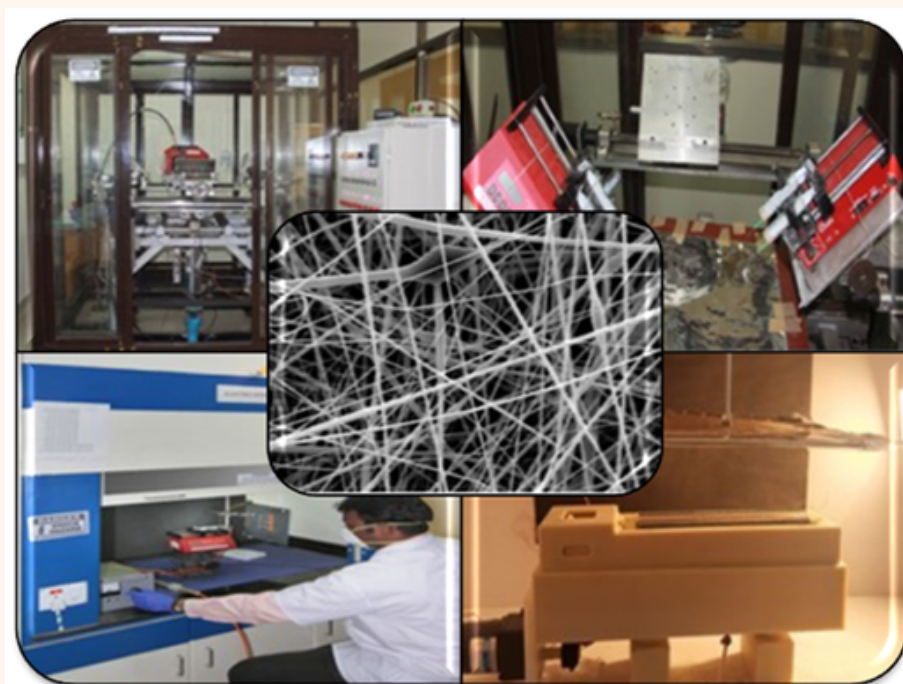




“इलेक्ट्रोस्पिनिंग द्वारा नैनोफाइबर उत्पादन” पर प्रशिक्षण

Training on “Electrospinning for Nanofibre Production”



December 10-12, 2025

भा.कृ.अनु.प. - केंद्रीय कपास प्रौद्योगिकी अनुसंधान संस्थान

ICAR-Central Institute for Research on Cotton Technology

D.A.R.E., Ministry of Agriculture & Farmers Welfare, Govt. of India

Adenwala Road, Matunga, Mumbai 400 019

About the Institute

ICAR-CIRCOT, founded in 1924 in Matunga, Mumbai, has been consistently serving the nation for a century. The institute operates under the Division of Agricultural Engineering within the Indian Council of Agricultural Research (ICAR), which is a component of the Department of Agricultural Research and Education, Ministry of Agriculture and Farmers Welfare, Government of India. The institute is committed to research and the advancement of innovative technologies aimed to improve the use of cotton and its by-products.

About the Training

The global market for nanoscale and electrospun fibres has attained a valuation of nearly 1 billion U.S. dollars. Electrospinning is a commonly utilized method for generating ultrafine fibres from conducting polymers. In this technique, a polymer solution or melt is exposed to a high voltage, resulting in the creation of extremely fine fibres that are collected on a counter-electrode. The quality of these fibres is influenced by various factors, including polymer concentration, solvent system, applied voltage, solution flow rate, and the distance between the electrodes. The electrospun nanofibres produced exhibit a high surface-area-to-volume ratio and a porous structure, rendering them suitable for a diverse field of applications such as filtration, technical and medical textiles, tissue scaffolds, drug delivery systems, seed treatment with minimal chemicals, biofertilizer carriers, nanosensors, and other advanced applications.

Objectives

- To train participants with the fundamental principles of electrospinning.
- To impart knowledge on the preparation and characterization of electrospun nanofibres.
- To demonstrate the different applications of electrospun nanofibres.

Course Contents

- Basic principles of electrospinning
- Different configurations of electrospinning systems
- Optimization of electrospinning process parameters
- Nanofibre characterization techniques
- Applications of electrospinning on textiles, filtration, sensor and agriculture

Facilities Available

- Multiphase electrospinning setup
- Needleless electrospinning setup
- BET Analyzer, SEM, AFM, FTIR, Raman spectroscope
- Nanomaterials characterization facility
- Nanocellulose Pilot Plant

Hands on Training

- Hands on training on Multi-phase electrospinning machine
- Electrospinning Process Optimization
- Characterization of Nanofibres (BET, SEM, AFM)

Date & Venue

December 10-12, 2025 at ICAR- Central Institute for Research on Cotton Technology (CIRCOT), Adenwala Road, Matunga (East), Mumbai 400019.

Accommodation

Guest house accommodation at ICAR-CIRCOT is limited and sharing accommodation shall be provided at standard rate on first-come-first-serve basis.

Fees

- The Programme fee is Rs. 10,000/- + 18% GST per candidate. The fee includes course fee, course material and working lunch. The fee does not include travel, lodging, conveyance and other personal expenses. There is 50% fee concession for academicians, students and participants from NARS, R&D organizations, Colleges and Universities. i.e., Rs. 5,000/- +18% GST per person.
- Participants from NEH regions / SC category are exempted from paying fees. The entire expenditure of NEH / SC participants, including travel (restricted to 3 tire AC), boarding& lodging will be borne by the institute as per the guidelines of Govt of India.

How to Apply

Interested participants can register through google forms;

<https://forms.gle/5Aq3LhjQPd51fDcMA> Last date for registration is 30th Nov 2025. After confirmation from the organizer, the fee has to be paid to the below mentioned account by NEFT transfer. The Bank account details for the NEFT transfer is given below:

Account Name : Director, ICAR-CIRCOT

Bank Details : State Bank of India, Commercial Branch, Dadar East, Mumbai 400014

Account No : 10001710244

IFSC Code : SBIN0004114

UPI ID : circot@sbi

How to Reach CIRCOT

Airport (Domestic)	: 10 km
Airport (International)	: 12 km
Nearest Railway Station (Dadar)	: 1 km
Nearest Bus Stop	: Kapol Nivas, Dr. Ambedkar Rd, Matunga East
Landmark	: Five Garden

Organisers

Programme Director	: Dr. S.K. Shukla, Director, ICAR-CIRCOT
Course Director	: Dr. N. Shanmugam, Head, MPD
Course Coordinators	: Dr. G.T.V. Prabu, Senior Scientist, MPD
:	Dr. N. Vigneshwaran, Principal Scientist, Head I/C, CBPD
	Dr. T. SenthilKumar, Senior Scientist, MPD
	Dr. G. Krishna Prasad, Senior Scientist, MPD

Contact us

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Senior Scientist,

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Email: geeteeveecircot@gmail.com



हर कदम, हर डगर
किसानों का हमसफर
भारतीय कृषि अनुसंधान परिषद

