#### How to Apply

Interested participants can register through google forms <u>https://forms.gle/UHXv5FYvDfS26dL5A</u> Last date for registration is 15<sup>th</sup> Feb 2023. 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

:10 km :12 km

: Dadar (1km)

: Five Gardens

: Kapol Nivas, Dr. Ambedkar Rd, Matunga East

: Dr. S.K. Shukla, Director, ICAR-CIRCOT

Dr. N. Vigneshwaran, Principal Scientist, CBPD

: Dr. N. Shanmugam, Head I/c, MPD

Dr. G. Krishna Prasad, Scientist, MPD

: Dr. GTV Prabu, Scientist, MPD

# How to reach CIRCOT

From Airport (Domestic)
From Airport (International)
Nearest Railway Station
Nearest Bus Stop
Landmark

#### Organizers

Programme Director
Course Director
Course Coordinators

#### **Contact us**

#### **Dr. GTV Prabu**

Scientist, MPD, ICAR-CIRCOT Adenwala Road, Matunga, Mumbai 400 019. Mob No : 9702524527 Website : www.circot.icar.gov.in

Email : geeteeveecircot@gmail.com

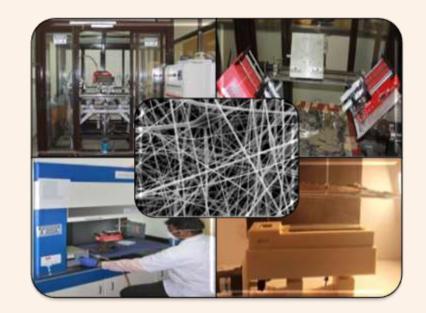


हर कदम, हर डगर किसानों का हमसफर ( भारतीय कृषि अनुसंधान परिषद



# TRAINING ON ELECTROSPINNING FOR NANOFIBRE PRODUCTION





# February 22 – 24, 2023

#### Organized by

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, located at Matunga in Mumbai, was established in the year 1924. This unit under the Division of Agricultural Engineering of the Indian Council of Agricultural Research (Department of Agricultural Research and Education, Ministry of Agriculture and Farmers Welfare, Government of India), is engaged in research and developing new technologies for better utilization of cotton and its by-products.

# About the Training

Electrospinning is one of the popular techniques for generating ultrafine fibres from conducting polymers. The current global market for nano-scale fibres reached 1 billion U.S. dollars. A conducting polymer solution or melts are subjected to very high voltage to draw very fine fibres which get collected on the counter electrode. The parameters like polymer concentration, solvent system, voltage, rate of solution discharge and the distance between electrodes decide the quality of the final product. The produced electrospun nanofibre has a very high surface area to volume ratio and porous structure making them suitable for a wide variety of applications like filtration, technical textiles, medical textiles, scaffolds, drug delivery systems, seed treatment using minimal chemicals, carriers for bio-fertilizers, nanosensors, and so on.

## Objectives

- > To acquaint participants with the basic principles of electrospinning
- To impart knowledge on the preparation and characterization of electrospun nanofibres
- > To demonstrate the various 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 electrospraying on textiles, filtration, sensor and agriculture

# **Facilities Available**

- Multiphase electrospinning setup
- Needleless electrospinning setup
- > BETAnalyzer, 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, etc.)

#### Date & Venue

February 22-24, 2023 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 person. The fee includes course fee, course material and working lunch. The fee does not include travel, lodging, conveyance and other personal expenses. For Academicians, students and employees of NARS personnel, 50% fee discount is applicable, i.e., Rs. 5,000/- +18% GST per person