

How to apply

Interested participants may register the google form:

https://docs.google.com/forms/d/e/1FAIpQLSeywxD6JFKFKaGja_pOanYLTv_aqsvU9Ye2KQbm6Jsg_wLTIA/viewform?usp=sf_link

The fee in the form of NIFT/ DD drawn/ at par Cheque in favour of "Director, CIRCOT" payable at Mumbai, may be sent to the below mentioned address so as to reach us on or before 24th February, 2024. The Bank account details for NEFT transfer is given below:

Account Name	Director, ICAR-CIRCOT
Bank Name	State Bank of India, Commercial Branch, Dadar East, Mumbai – 400014
Account No.	10001710244
IFSC Code	SBIN0004114

How to Reach CIRCOT

From Airport (Domestic) : 10 km From
Airport (International) : 12 km
Nearest Railway Station : Dadar (1.7 km)
Matunga (E) and Five Gardens Bus Stop
Land mark : Five Gardens, Matunga East

Organizers

Programme Director : Dr. S. K. Shukla, Director, ICAR-CIRCOT
Course Director : Dr. N. Shanmugam, PS & Head, MPD
Course Coordinators : Dr. T. Senthilkumar, Senior Scientist, MPD
Dr. G. Krishna Prasad, Senior Scientist, MPD
Dr. G.T.V.Prabu, Senior Scientist, MPD
Dr. A. K. Bharimalla, Principal Scientist, E-TTD

Address for correspondence

Dr. T. Senthilkumar,
Senior Scientist, MPD, ICAR-CIRCOT
Adenwala Road, Matunga East
Mumbai- 400 019
Telefax : +91 22-24127273/76 (Ext- 414)
Mobile : +91 9944933908
Email : senthilcircot@gmail.com



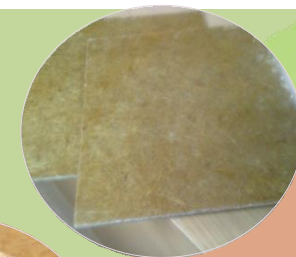
Designed by : Miss. Laxmi Manoj Singh, YP-LL, TTD



ISO 9001:2015
NABL 17025:2017

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

Training on Composite Materials and its Applications



06-08 March, 2024

Organized by

ICAR-Central Institute for Research on Cotton Technology (ICAR-CIRCOT)
D.A.R.E., Ministry of Agriculture & Farmers Welfare, Govt. of India
Adenwala Road, Matunga, Mumbai 400019 (MS) INDIA

Introduction

The ICAR-Central Institute for Research on Cotton Technology (ICAR- CIRCOT), one of the premier constituent institutes of the Indian Council of Agricultural Research (ICAR), was established in the year 1924. The Institute is conducting research and development on all aspects of post- harvest processing of cotton and value addition to cotton by-produce with following mandate:

- Basic and strategic research on processing cotton and its agro-residues, development of value added products and quality assessment.
- Skill development and business incubation services and function as referral laboratory for cotton fibres.

The Institute has been conducting skill development programmes to propagate, encourage and guide entrepreneurs to successfully adopt and market commercially viable technologies and to equip people with best practices in cotton ginning, quality evaluation of cotton fibres and value addition to by-products.

About the training programme

Composites are hybrid materials made of a polymer resin reinforced by fibres, combining the high mechanical and physical performance of the fibres. Composite materials offer higher specific strength and stiffness than other conventional materials. The reinforcing phase, is in the form of synthetic or natural fibres, sheets, or particles, and is embedded in the other materials called the matrix phase. The Indian composites market is expected to reach an estimated \$1.9 billion by 2026 with a CAGR of 16.3% from 2021 to 2026. The future of the Indian composites market looks promising with opportunities in pipe and tank, aerospace and defence, wind energy, electrical and electronics, construction, transportation, marine and telecommunication. The depletion of petroleum resources coupled with awareness of global environmental issues has generated the need for new green materials independent of petroleum based resources. The development of completely biodegradable composite materials using biopolymers has a great scope in future.

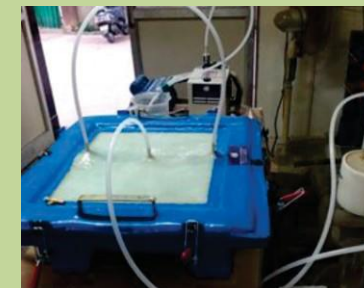
Hence acquiring the basic knowledge is very essential to be effective in the industry and R&D sectors for making better products. ICAR-CIRCOT is actively carrying out research in the field of fibre reinforced composites for many years, with emphasis on lignocellulosic fibre based composite, Nano based bio composite, starch based green composite and nanocomposite for various applications such as cement concrete, paper, agricultural, packaging materials etc.,. Based on the expertise gained in the field of fibre reinforced composites, ICAR-CIRCOT has designed this training programme for the benefit of industry personnel, researchers, academicians and students.

Objectives

- To impart knowledge on reinforcement used in manufacture of composites
- To equip participants with knowledge on resins and bio composites
- To familiarise the trainees about principles of various composites manufacturing process

Course Content

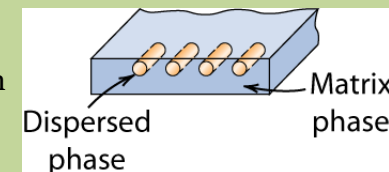
- Introduction to composite materials
- Reinforcement and matrix
- Composite production techniques
- Characterization of composites
- Natural fibre reinforced composite
- Nanocomposites
- Bio-nanocomposite films for packaging
- Nano fibrous composites for agricultural application
- Rubber composites
- Composite based smart textiles



Vacuum Infusion Moulding

Hands on Training

- Hands-on training on composite preparation
- Demonstration on Bio-nanocomposite films preparation
- Demonstration on particle board preparation
- Industry visit – Rubber Composite unit



Fibre Reinforced Composites

Date and venue

March 6-8, 2024 at ICAR-Central Institute for Research on Cotton Technology (ICAR-CIRCOT), Adenwala Road, Matunga (East), Near Five Gardens, 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

- For Industry Personnel : Rs. 10, 000 + GST (18%)
 - For Academicians, Students and NARS Personnel: Rs. 5, 000 + GST (18%)
- The course fee include, course material and working lunch. The fee does not include travel, lodging, conveyance and other personal expenses.