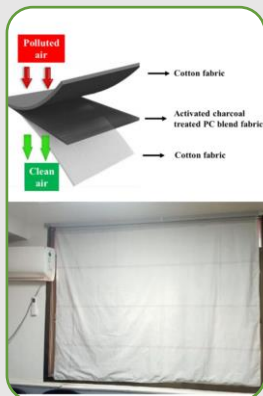




## **Technology of the Month: Air purifying curtain using activated charcoal for indoor air filtration**



\* Air pollution poses a significant threat to health, necessitating effective solutions to mitigate its impact, both indoors and outdoors. The developed product focus on indoor air purification, comprising integrated distinct fabric layers, each contributing unique functionalities aimed at optimizing air purification. The combination of cotton fabric with activated charcoal-treated polyester and cotton blend fabric resulted in a multilayer curtain capable of effectively filtering particulate matter and total volatile organic compounds (TVOCs) from indoor air. Comparative analysis with a market-available air purifying curtain revealed comparable air permeability and filtration efficiency, indicating the potential of the developed curtain as a viable alternative for indoor air filtration. The multi-layered design, coupled with the incorporation of activated charcoal, offers advantages in terms of filtration efficiency and potential odour absorption, positioning the developed curtain as a promising solution for improving indoor air quality.

## **National Seminar (in Hindi)**



\* A National Seminar (in hybrid mode) in Hindi on 'Challenges and Strategies for the Successful Adoption of Mechanization of Cotton Harvesting in India' was organized at ICAR-CIRCOT, Mumbai on September 27, 2024 jointly with the Indian Fibre Society (IFS), Mumbai. Dr. S. N. Jha, DDG (Ag Engg), ICAR New Delhi was the Chief Guest. Dr. C. D. Mayee, Former Chairman, ASRB, New Delhi, Dr. Y. G. Prasad, Director, ICAR-CICR, Nagpur and many other dignitaries including industrialists graced the occasion. This seminar included four technical sessions and one poster session covering varied areas in connection to mechanization of cotton harvesting in India. Two MoUs were signed and one publication was released on this occasion.

## **Visit of Hon'ble Union Minister of Textiles, Shri Giriraj Singh**



\* The Hon'ble Union Minister for Textiles, Shri. Giriraj Singh and Smt. Prajakta L. Verma, Joint Secretary (Fibre), Ministry of Textiles, visited GTC, Nagpur on September 25, 2024. Other dignitaries during the visit were Dr. K. Narsaiah, ADG (PE), Agril. Engg. ICAR, New Delhi, Dr. Y. G. Prasad, Director, ICAR-CICR, Nagpur, Shri Lalit Kumar Gupta, CMD, CCI Ltd., Mumbai, Dr. C. D. Mayee, Former Chairman, ASRB, ICAR, New Delhi, Dr. A. L. Waghmare, Director, Directorate of Cotton Development, Nagpur, Dr. M. K. Sharma, CEO cum Director, M/s Bajaj Steel Industries Ltd., Shri Venkat Rao, COO, M/s Nuziveedu Seeds Ltd., Hyderabad, Shri Bhavesh Shah, President and Shri Irfan Khan, Secretary of Vidarbha Cotton Association and Shri Dilip Thakre, a progressive farmer from Akola.

## **MoUs signed**



\* Two MoUs were signed during the National Seminar (in Hindi) held on September 27, 2024: one for collaborative research with M/s. Dhanaaj Agri Tech Pvt Ltd, Parbhani, and M/s. Bajaj Steel Industries Ltd., Nagpur, on the 'Refinement and adoption of a novel seed cotton compacting machine'; and another with RUIA College, Mumbai, for the 'Creation of a framework for collaboration between ICAR-CIRCOT and RUIA College.

## Stakeholder Interactions

- Dr. Manoj Kumar Mahawar attended a meeting on August 26, 2024 with the team of M/s. Reliance Energy, Maudha (Nagpur) to explore about research collaborations about using cotton stalk for biogas generation and pelletization.
- Dr. N. Vigneshwaran had an interaction meeting with Mr. Vinay Bhardwaj and Mr. Raja from M/s. Reliance Industries Limited (RIL), Mumbai on September 04, 2024 for review of the ongoing project on 'Production of Nanocellulose from Algae'.
- Interaction Meet of Senior Management team comprising of the CEO, the Analyst and the Chief Sales Officer of SLC, Agricola Brazil with ICAR-CIRCOT scientists and other stakeholders was held on September 16, 2024 at the Institute. Industrialists and stakeholders from M/s Bajaj Steel Industries Limited, M/s Gimatex Industries Pvt. Ltd., Cotton Corporation of India Ltd., Cotton Association of India Ltd., M/s Wakefield Inspection Service, M/s Arvind Ltd., Bhopal, and subject experts from SASMIRA, Textile Committee, etc. participated in the meet.



## Skill Development Programmes

- ICAR-CIRCOT organized an Integrated Special Training Course for the field officers (trainee) recruited for cotton procurement, of the Trident Group, Sanghera, Punjab. The training was imparted in the area of "Cotton Grading, Procurement and Marketing" in two batches: First, for 12 days during September 02-13, 2024 and Second, for 12 days during September 16-27, 2024, for 17 participants, each.
- Two day training programme on 'Post-Harvest Management of Cotton & Value Addition to its By-produce' was organized at GTC, Nagpur during September 12-13, 2024 for ATMA farmers of Akot, Dist. Akola, Maharashtra. Total 25 participants attended the training programme.
- GTC, Nagpur organized a 5 day training programme on 'Grading, Procurement & Processing of Cotton' for Junior Commercial Executives of CCI from September 23-27, 2024. Total 38 participants including 4 females participated in the training.



## Human Resource Development

- A Hindi workshop (hybrid mode) on 'Unicode Typing' was conducted on September 05, 2024 for all staff of the institute including regional stations.
- Shri Sainath N. Sahane is attending the Induction training programme for newly recruited AFAO at Arun Jaitley National Institute of Financial Management (AJNIFM), Faridabad and NASC, New Delhi, during September 17 to October 04, 2024.
- About 60 staff have completed the e-learning modules for 6 hours on the iGot Karmayogi Bharat platform till date.



## Swachh Bharat Mission

- \* The nationwide "Swachhata Hi seva Abhiyan 2024" is being observed from September 17, 2024 to October 02, 2024 on the theme of *Swabhav Swachhata – Sanskar Swachhata*. The Institute is organizing various activities like, Taking Swachhata Pledge, Display of Banner at Prominent Places, 'Ek Ped Maa Ke Naam' plantation drives (at Nagpur and Sirsa), Swachhata Walkathons, Hygiene Practices in Laboratory, Swachhata Samvad with a Street Play (Nukkad Natak), Creative initiative transforming waste into art and promoting community engagement, Forming a Human Chain to raise awareness and demonstrate commitment to cleanliness and sanitation, Mega Cleanliness Drives with citizen participation & partner mobilization, Identification of difficult and dirty spots and transformations with partnerships, picture/painting competition on the Swachhata theme, Preventive Health Check-up camp for sanitation workers and their families.



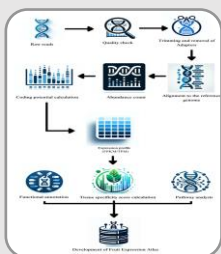
## Awards & Accolades

- The Institute received an **Appreciation Certificate** under the Swachhata Pakhwada Award-2022 from the Council, dated 16<sup>th</sup> July 2024, based on effective participation.



## Publications

1. Roy, A., Chaurasia, H., Kumar, B., Kumari, N., Jaiswal, S., Srivastava, M., Iquebal, M.A., Angadi, U.B. and Kumar, D., 2024. FEAt: A Comprehensive web-based Expression Atlas for functional genomics in Tropical and Subtropical Fruit Crops. BMC Plant Biology. Preprint: <https://doi.org/10.21203/rs.3.rs-4716219/v1>.
2. Kautkar, S., Dukare, A., Pandiyani, K., Satankar, V., Bharimalla, AK and Katkar, K. 2024. Optimization of process for preservation of green cotton biomass as silage for farm animals. International Journal of Advanced Biochemistry Research, SP-8(9): 923-926.





# Glimpses of Activities

**Medical Camp at the Institute on September 26, 2024**



**Swachh Bharat Mission Activities (Sep 17 to Oct 02, 2024)**





## Interaction Meet with SLC Agricola, Brazil on September 16, 2024



## National Seminar (in Hindi) on September 27, 2024



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