





ISO 9001:2015

## Global Excellence in Cotton Technology

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# **Technology**

Three technologies developed by ICAR-CIRCOT and certified by the council during the 97<sup>th</sup> foundation day of ICAR on July 16, 2025 are,



- Continuous Flow Cottonseed Dryer: The direct heating type dryer reduces cottonseed moisture from 30–40% to an optimum 10–12%, enhancing oil recovery and protein content by 2–3% with an overall thermal efficiency of 66%.
- This technology was also released during the ICAR foundation day and is recognised among Top 5 Technologies from the Agricultural Engineering SMD.



• Industrial Multilayer Woven Cut-Resistance Gloves: The developed gloves has a unique blend of Ultra-High Molecular Weight Polyethylene (UHMWPE) and cotton offers an ideal combination of cut resistance, flexibility, and comfort, meets TDM cut resistance standard Level D.



Novel Blends of Cotton/Hemp: The cotton/hemp woven fabrics
exhibit superior absorbency, enhanced air permeability, and
improved wear comfort, helping to promote natural fibre
diversification.

#### **Patent Filed**

- Patent for "A Process for the Production of Gossypol Acetic Acid" was filed on July 15,2025. (Application number: 202521067478)
- Patent for "Finished Woven Fabric and a Process for Its Preparation" was filed on July 22, 2025. (Application number: 20252106821)

#### **HRD**



 A five-day Orientation Training for 13 newly recruited technical personnel was organized at ICAR-CIRCOT Headquarters, Mumbai from July 07-11, 2025.

- A training session on the latest version of e-Office was conducted for all staff members on July 17, 2025, by the ICT Unit of ICAR.
- A five-day Orientation Training Programme for two newly joined scientists was organised at the ICAR-CIRCOT Headquarters in Mumbai from July 28 to August 01, 2025.

#### • ICAR-CIRCOT Recognised for Skill Development Training

ICAR-CIRCOT has been recognised for conducting specialised skill development programs on cotton grading and marketing for 177 newly recruited staff members of The Cotton Corporation of India Ltd. The program is valued at ₹30 lakh.

# **Skill Development Program**



Six-day training program on "Double Roller Ginning Technology & Basics of Cotton Grading." was organised at Ginning Training Centre (GTC) of ICAR-CIRCOT at Nagpur for ginners from July 7-12, 2025. 18 participants attended the program.



Five-day Training program on "Cotton Grading, Procurement and Marketing" was organised at CIRCOT HQs, Mumbai from July 21-25, 2025, for 14 newly appointed officials of the Cotton Corporation of India (CCI).



Five-day training program was organised at GTC, Nagpur on "Grading, Procurement, and Processing of Cotton" for Junior Commercial Executives of the CCI from July 21-25, 2025. 29 participants attended.

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# विस्ती दशर्यभारता भोटाई प्रशिक्षण केंद्र

## **Events**

A Hindi workshop titled "ए आई उपकरणों की सहायता से अनुवाद एवं टंकण" (Artificial Intelligence se Anuvaad va Tankan) was organized by Ginning Training Centre (GTC), Nagpur on June 30, 2025.



The Ginning Training Centre of ICAR-CIRCOT, Nagpur, has been awarded the Protsahan-II (Encouragement) Certificate by the Nagar Rajbhasha Karyanvayan Samiti, Nagpur (Karyalay-2).

## **Educational Visit**



A group of students from Acharya N.G. Ranga University, Advanced Post Graduate Centre, visited the Quality Evaluation Unit (QEU) of ICAR-CIRCOT, Guntur Unit on July 16, 2025.



A group of trainees from the Directorate of Marketing and Inspection (DMI), Nagpur visited the Ginning Training Centre, ICAR-CIRCOT, Nagpur, on July 14, 2025.

# **Guest Lecture**



Dr Prashant Shukla, Professor, Dept. of Mechanical Engineering, IIT-BHU, Varanasi, delivered an insightful lecture on the topic "Challenges & Way Forward on Industry-Oriented Research" on July 28, 2025, at ICAR-CIRCOT, Mumbai.

## **Publications**

#### RESEARCH PAPER

 Jalgaonkar K, Krishna Prasad G, Mahawar MK, Senthilkumar T, Dukare A, Jha NK, Dhakane-Lad J, Patil S, Jagajanantha P, Kautkar S. (2025). Application of Natural Plant Fibres in Development of Sustainable Concrete: A Review. Journal of Scientific and Industrial Research, Accepted for publication (NAAS:6.70)

#### TECHNICAL/POPULAR ARTICLE

- Sharma, K., Kumar, M., Totade, S., Kadam, K. (2025). Harnessing Microbial Cell Factories for Sustainable Production of Plant Metabolites from Lignocellulosic Biomass. Volume: 05, Issue: 03 (MAY-JUNE, 2025). Agri Articles, ISSN: 2582-9882.
- हिमांशुशेखरचौरसियाएवंसुंदरमूर्तिचंद्रशेखरन (2025). कपास क्षेत्रमेंवृद्धिऔरविकासप्रवृत्ति. आधुनिककृषिअभियांत्रिकी (Hindi volume), Vol. 4(2), 59-60.
- Chaurasia, H. and Chandrasekaran, S. (2025). Trends in the Growth and Development in the Cotton Sector. Agricultural Engineering Today (English volume), 49(2), 59-60.

#### **New Appointment**

• Dr. Sujan Adak, Scientist has joined the Ginning Training Centre, ICAR-CIRCOT, Nagpur, on July 12, 2025.

# **Internship Program**

- Two students, K. N. Nivas and Siva Prasad T. N., from SRM Easwari Engineering College, Chennai, successfully completed an internship project titled "3D Printed Hybrid Orthosis for Fracture Immobilization" under the guidance of Dr. Jagajanantha at the Quality Evaluation and Improvement Division (QEID), ICAR-CIRCOT, Mumbai, during the period May 27 to July 18, 2025.
- Ms. Priyanka Singh, a B.Sc. (Hons.) Microbiology 5th Semester student from ITM University, Gwalior, successfully completed one-month internship at Ginning Training Centre (GTC), Nagpur under the supervision of Dr. Pandiyan from July 1 to 31, 2025.

# **Industry Interface**

- A discussion with M/s. HiMedia Laboratories Pvt. Ltd., Thane on 23<sup>rd</sup> July 2025 regarding commercialization of the technology on "Gossypol Extraction from Cottonseed Meal."
- A discussion with M/s. Megabags, Pune, on 25<sup>th</sup> July 2025 regarding the commercialisation of the technology on "Nanosilver Finished Antimicrobial Cotton Textile Material" for packaging of fruits and vegetables.

# **Exhibition**

ICAR-CIRCOT participated in the exhibition organized during the 97<sup>th</sup> Foundation Day of ICAR, held on July 16, 2025, at ICAR Headquarters, New Delhi.





The review meeting of the ICAR-CIRCOT R-ABI was held on 18<sup>th</sup> July 2025 at Krishi Bhawan, New Delhi, reviewed by officials from the Ministry of Agriculture & Farmers Welfare.





#### **Contact us**

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