



A Monthly Insight into the ICAR-CIRCOT

E - News Letter

January 2017, Vol.3. No.10

In this Issue >>

- ▲ Special News
- ▲ Technology Insight
- ▲ Trainings
- ▲ Events
- ▲ Visits
- ▲ Exhibition
- ▲ ABI
- ▲ Conference/
Seminar/
Workshop/
- ▲ HRD
- ▲ Awards
- ▲ Promotion
- ▲ Upcoming Events

Published by:

Dr. P.G. Patil

Director, ICAR-CIRCOT

Editorial Board:

Dr. P.G. Patil

Er. A. K. Bharimalla

Dr. C. Sundaramoorthy

Dr. S. V. Ghadge

Dr. Virendra Prasad



Director's Desk...

Nanotechnology, understanding and manipulating of materials in the size range of 1 to 100 nm, impacted diversified fields such as physics, chemistry, biology, materials science and engineering.

This frontier area of research has the potential to revolutionize various industries including agriculture, food, textiles, pharmaceuticals, biotechnology, electronics and composites with new tools for the diagnosis & treatment of diseases, nano-fertilizer system, bio-nanocomposites, nanofiltration for water purification etc.

The ICAR-Central Institute for Research on Cotton Technology (ICAR-CIRCOT) is actively carrying out research in the field of nanotechnology from 2004 onwards, with major emphasis on nanofinishing on cotton textiles and nanocellulose from cotton linters for biocomposite applications. Based on the expertise gained in the field of nanotechnology, ICAR-CIRCOT has already arranged ten training programmes for various stakeholders. In continuation, a training programme on "Advances in Applications of Nanotechnology" is scheduled during Feb 6-10, 2017 for diversified stakeholders interested in nanotechnology with the objectives to acquaint the participants with the recent advances in nanotechnology, to gain hands-on experience in synthesis & characterization and their application in textiles, composites, nanosensors, agriculture & allied sectors.

P.G. Patil

ICAR-CIRCOT, Mumbai

Parliamentary Sub-Committee on Official Language

The second sub-committee of parliament on official language undertook the inspection of four central government offices in Mumbai viz., ICAR-CIRCOT, Doordharsan, National Film Development Council and All India Radio during January 10-12, 2017. The hon'ble members of the committee include Rajya Sabha MP Dr. Prasanna Kumar Patsani and Dr. Sunil Baliram Gaikwad. Dr. P.G. Patil, Director, ICAR-CIRCOT was the Coordinating Officer for the event. Dr S.N. Jha, ADG (PE), ICAR, New Delhi represented the council during the inspection. Dr. P.K. Mandhyan, Sr. Scientist, CIRCOT was the Liaison Officer supported by a team of the Institute staff. Director, CIRCOT presented the work related to official language implementation carried out in the Institute. The hon'ble members expressed satisfaction on the implementation of official language at the institute.



Members of Parliamentary Sub-Committee on Official Language with ICAR-CIRCOT Officials

Dr. P.G. Patil, Director, ICAR-CIRCOT presenting the work carried out to implement official language in the institute



Contamination of Indian Cotton

The Indian Cotton were designated as the most contaminated descriptions by the International Textile Manufacturers Federation (ITMF), Zurich as published in its biennial Cotton Contamination Survey. This report was based on the response of around 15-16 participating mills. In order to understand the actual situation, in the context of the implementation on Technology Mission on Cotton and modernization of ginning and pressing units, a survey on the contamination of Indian Cottons was undertaken covering around 50 spinning mills from Coimbatore and Kolhapur regions as well as clusters in Punjab & Haryana. The major contaminants observed in the lot include fibres and strings of woven plastic and plastic films, sand dust, grease and colour marks, cloth bits, jute & hessian, metal parts, leaf bits etc. The plastic films were found to be the serious contaminant. The contamination status of the major cotton descriptions grown in the country are presented in the table below in the form of percent respondents reporting insignificant, moderate and severe contamination.

Table: Contamination of Indian Cotton

Description	Respondent %		
	Insignificant	Moderate	Severe
S-6	74	17	9
MCU 5	68	21	12
DCH 32	73	19	8
MECH	69	26	5
Bunny	70	24	6
All Country /all growth	74	17	9

The overall contamination status of the cotton were graded as insignificant to moderately contaminated with less than 10% of the surveyed mills reporting severe contamination.

Trainings

Training on Ginning Technology and Quality Evaluation at GTC, Nagpur

A one week training program on “Double Roller Ginning Technology and Cotton Quality Grading” was conducted at GTC, Nagpur during January 2-7, 2017 for participants from Maharashtra and Tamilnadu. The programme dealt with fibre quality assessment such as fibre length, strength, fineness and maturity, cotton grading and marketing, DR ginning technology and cotton by-products utilization. The sessions also covered practical aspects of cotton processing like manual grading of cotton, gin settings such as beater and fixed knife settings, repairs and maintenance of ginning and pressing machinery and humidification in ginning system. Guest lectures on cotton export, establishment of modern ginning and oil mill plants were also arranged. The trainees were taken to M/s Bajaj Steel Industry & M/s Sri Bhagirath Textiles Ltd, Nagpur for industrial exposure visits.



Group Photo: Training program on “Double Roller Ginning Technology and Cotton Quality Grading” at GTC, Nagpur during January 2-7, 2017

Training on Advances in Microscopy

A three day training programme on “*Advances in Microscopy*” was conducted at ICAR-CIRCOT, Mumbai during January 16-18, 2017. There were eight participants including students, teachers and researchers. Curriculum included lectures on basics of microscopy as well as hands-on training on electron microscopy, light microscopy and atomic force microscopy. Trainees were educated on sample preparation techniques, handling of microscopes and analysis & interpretation of micrographs as a part of the skill development initiatives by the Govt of India. Dr KM Parlikar, Former Head, Technology Transfer Division was invited as an expert on microscopy. Director Dr. P.G. Patil congratulated the participants and urged them for further skill development in this area.



Dr. P.G. Patil, Director and Dr. K.M. Parlikar Former Head TTD releasing the training material



Group Photo: Training program on Microscopy during January 16-18, 2017

Training on Hindi Parangat

ICAR-CIRCOT is organizing teaching class for **Hindi Parangat** under Hindi Teaching Scheme for January to May, 2017 Session. A total of 9 staff members are participating in this programme.



ICAR-CIRCOT staff participating in Hindi Parangat training class

Events

The Seventh Pay Implementation

A training session for administrative staff on implementation of the 7th Central Pay Commission recommendations was conducted on January 23, 2017. This training was imparted by Shri V.R. Ramankutty, Retd. Assistant Controller of Accounts, Office of the Regional Training Centre, Ministry of Finance, Government of India, Mumbai. A total of 34 employees including 7 officials from ICAR-CIFE, Mumbai participated in the training programme. The training helped the participants to gain knowledge about the various aspects of the 7th pay and the methodology of pay fixation under the CCS (Revised) pay rules, 2016.



Shri V.R. Ramankutty giving training to ICAR-CIRCOT staff on 7th pay fixation

Brain Storming Sessions

Utilization of Cotton Stalks as Animal Feed

A brainstorming session on “*Utilization of Cotton Stalks as Animal Feed*” was organized at ICAR-CIRCOT on January 9, 2017. A team of scientists from IIT, Mumbai headed by Prof. Narendra Shah and in-house team of scientists headed by Dr. P. G. Patil, Director participated in the discussion. Dr. Narendra Karamble from Bombay Veterinary College also participated in the discussion. The main focus was on value addition of cotton stalks for making it suitable as animal feed.

Agri-Business Incubation Ideas

The brainstorming session on “*Agri-Business Incubation Ideas*” was organized on January 21 to explore various innovative methods for commercialization of Institute technologies through business incubation / start-ups / entrepreneurships. Dr. P. G. Patil, Director chaired the session and Dr. S. Sreenivasan, former Director, CIRCOT, was also present. The meeting was attended by all the scientist.



1st Brain storming session on agri business incubation ideas on January 21, 2017.

Participation in Brain Storming Session

Dr. Sujata Saxena, Principal Scientist & Head I/C Chemical and Biochemical Processing Division participated in the brainstorming session on “*Climate smart technologies for enhancing vegetable oil production*” organized by ISOR and ICAR- IIOR, Hyderabad in collaboration with NAAS, New Delhi during January 19-20, 2017 and presented a paper on “Towards self- sufficiency in oilseeds- contribution of cottonseed oil”.



Republic Day Celebration

The 68th republic day was celebrated in the Institute on January 26, 2017. Dr. P.G. Patil, Director, hoisted the national flag, followed by recitation of the national anthem. While addressing the gathering on the occasion, the freedom fighters of India who sacrificed their lives to make India independent were remembered along with leaders who played important role in shaping the Indian republic.



Flag Hoisting Ceremony at the Institute on the 68th Republic Day

Swachh Bharat Abhiyaan

A cleanliness programme was organized in Mechanical Processing Division (MPD) on January 27. The MPD staff members participated in cleaning the blow room area by removing waste cotton and the condemned equipment.



Cleaning Activity in Mechanical Processing Division on January 27, 2017

Student Visits

At ICAR-CIRCOT, Mumbai

Sixty final year B.Sc (Home Science) students of University of Agricultural Sciences, College of Rural Home Science, Dharwad visited the Institute on January 3, 2017. For them, a visit to M.P.D., F.T., and Y.T. was arranged. They were briefed about the cotton processing and were taken around the Mechanical Processing Division, Fibre and Yarn testing sections.



Students of University of Agricultural Sciences, College of Rural Home Science, Dharwad at the Institute on January 3, 2017

At Regional Unit, Sirsa

Ninety final year BSc (Ag) students from CCS Haryana Agricultural University, Hisar visited CIRCOT Regional Unit, Sirsa on January 27, 2017 under the “Rural Agricultural Work Experience” programme (RAWA 2016-17). Dr. Hamid Hasan, Officer In-charge delivered a lecture on overall cotton scenario in India and the role of fibre technology in cotton breeding programmes. The students were deliberated upon the various activities of ICAR-CIRCOT and its contribution to Agriculture and Textile sectors. They were given demonstration of working on various equipment like Cloy Gin, Trash Analyzer and High Volume Instruments. They were also made aware of how cotton stalks can be utilized for compost preparation, mushroom cultivation and particle board manufacture etc.



Students of CCS Haryana Agricultural University, Hisar at Regional Unit, Sirsa on January 27, 2017

Farmers' Visits

At ICAR-CIRCOT, Mumbai

Thirty five women farmers from Farmer Training Center, Khedbrhma, Dist: Sabarkantha, Gujarat visited CIRCOT on January 23, 2017. They were briefed about the Institute activities. Clean cotton picking methods, worldwide cotton scenario and information on cotton by-products were shared with them. They were taken around the exhibition cum visitor room to understand recent post-harvest technologies developed in the field of cotton.



Women farmers from Farmer Training Center, Khedbrhma, Dist: Sabarkantha, Gujarat at the Institute on January 23, 2017.

Director's Visits

- Dr. P. G. Patil, Director, ICAR-CIRCOT visited Kolkata during January 02-04, 2017 to attend the 79th Foundation Day of ICAR-NIRJAFT as a Guest of Honour. Sh Sudarshan Bhagat, Hon'ble Minister of State, Ministry of Agriculture and Farmers Welfare, Govt. of India was the Chief Guest of the Function. He delivered a talk on the occasion and also attended the Dr. C.R. Nodder Memorial Lecture delivered by Dr. S. Sreenivasan, Former Director, CIRCOT, as a part of celebration. He visited various laboratories and pilot plants on post-harvest processing of jute and allied natural fibres.
- Dr. P. G. Patil, Director, ICAR-CIRCOT visited Agricultural Exhibition and Farmer's Mela, on January 19, 2017 organized by Krishi Vigyan Kendra, Baramati, Dist. Pune, Maharashtra. More than five lakh farmers visited this 4 day event (19-22 January, 2017). He also participated in discussion held with farmers and shared the information on CIRCOT Technologies. The Mela was inaugurated by Sh. Pandurang Fundkar, Hon'ble Agriculture Minister, Government of Maharashtra.



Exhibition/Technology Demonstration Programme

- An Exhibition was organized by ICAR-CIRCOT on the occasion of visit of Parliamentary Hindi Sub-Committee at Hotel Taj, Santacruz, Mumbai on January 11, 2017.
- A one day awareness and demonstration program on preparation of bio-enriched compost and oyster mushroom cultivation using cotton stalks was conducted at Village Pavnoor, Taluk Wardha, Dist. Wardha organized by GTC, Nagpur on January 30, 2017. No. of participants: 35.

Agri-Business Incubation (ABI) Centre

Technologies Available for Incubation at the ICAR-CIRCOT ABI Centre

Synthesis of nano-zinc oxide particle by novel chemical route

Energy efficient nanocellulose production technology

CIRCOT's Accelerated processing of cotton stalk for manufacture of compost

Gossypol reduction and nutritive quality improvement in cottonseed cake for its use in non-ruminants feed

Design and development of textile through computerized sampling facility with cad

Process for preparation of absorbent cotton

Briquetting and pelleting of cotton stalk



Conference/ Seminar/ Workshop

Participation in Conference / Seminar / Workshop

- Dr. R. Guruprasad, Scientist attended the Second Workshop on “ICAR Research Data Management Repository” during 24-25 January, 2017 at New Delhi.
- Er. Ashok Kumar Bharimalla, Sr. Scientist attended workshop on “Agri-Tech Commercialization” during 18–20 January, 2017 at NASC Complex, Pusa, New Delhi organized by Technology Dept. Board, Dept. of Science and Technology, Govt. of India, Indian Institute of Corporate Affairs and Technology Information, Forecasting and Assessment Council (TIFAC), DST, Govt. of India.
- Dr. N. Vigneshwaran, Sr. Scientist attended the one-day workshop on “Propagation of Extra Mural Research Scheme of Ministry of AYUSH Govt. of India” held on January 16, 2017 at Hotel Kohinoor Park, Mumbai.



Human Resource Development

- Scientists Dr. Manoj Kumar, Dr. Sharmila Suresh Patil and Ms. Archana Mahapatra attended a training programme on “*Advances in Microscopy*” organized at ICAR-CIRCOT, Mumbai during January 16 – 18, 2017.
- Technical personnel Smt. V.G. Udikeri, Shri M. Bhaskar and Shri B.V. Shirsath attended a training programme on “*Maintenance of Lab and Field Equipment for Technical staff of ICAR*” at ICAR-CIFE, Mumbai during January 17 – 30, 2017.

Awards

Awards / Recognition

The Sajjan Gupta – Konark Memorial Award 2017 (for excellence in Bio-Research) was awarded by M/s.Konark Group & VES college of Arts, Science & Commerce, Chembur, Mumbai for the research article “Application of nano-lignin onto cotton fabrics to impart multifunctional properties” presented by Siddhi Juikar and N. Vigneshwaran in one day National Level Research Meet in Biotechnology on January 18, 2017.

Promotion

- Departmental Promotion Committee (DPC) Meeting for Clearance of Probation in respect of Scientists Dr P. Jagajanatha and Ms Varsha Satankar was held on January 28, 2017
- The following employees in Laboratory Technician Category I & II were promoted to the next higher grade.

S.No.	Name	Post to which Promoter	Date of Effect
1	C.D. Prabha	Senior Technical Officer	01/07/2015
2	N.D. Kambli	Technical Officer	28/12/2015
3	V.G. Udikeri	Technical Officer	04/08/2015
4	A.R. Jadhav	Senior Technical Assistant	19/04/2016
5	D.J. Dhodia	Senior Technician	01/03/2016
6	Umrao Meena	Senior Technician	23/03/2016
7	Yogesh Nagpure	Senior Technician	05/04/2016



Proposed activities for the year 2016-2017

Seminar/Conference/Industry Academia meet etc.

Name of the programme	Date
Technology Mela	March 1, 2017

Training cum-skill development programmes

S.No.	Title of Training	Period	Fees (Rs) (excluding Service tax)
1	Advances in Applications of Nanotechnology	Feb 6-10, 2017	25,000
2	Quality Evaluation of Cotton	Feb 20-24, 2017	10,000
3	Double Roller Ginning Technology & Basics of Cotton Grading,GTC, Nagpur	Feb 20-25, 2017	10,000
4	Spectroscopic and Chromatographic Techniques for Material Characterization	Mar 1-4, 2017	15,000
5	Instrumental Evaluation of Clothing Comfort	Mar 6-10, 2017	50,000



Contact detail

Er. A. K. Bharimalla, Senior Scientist & Head In-charge, TTD
ICAR-Central Institute for Research on Cotton Technology, Adenwala Road, Matunga (E)
Mumbai-400019.

Email: bpd.circot@gmail.com; Ph: 022-24127273, Fax: 02224130835, Mob: 9702878249
Details are available at our Website: www.circot.res.in



ADDRESS FOR CORRESPONDENCE

The Director

ICAR-Central Institute for Research on Cotton Technology

DARE, Ministry of Agriculture, Govt. of India

Adenwala Road, Matunga (E), Mumbai – 400 019

Ph: 022 - 24127273/76; Fax: 022 – 24157239

e-mail: icarcircot.news@gmail.com

www.circot.res.in