



How to apply

Interested participants may send their application in the prescribed format which is available on the website www.circot.res.in. The fee in the form of 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 17th December 2018. 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 ICAR-CIRCOT

From Airport (Domestic)	: 10 km
From Airport (International)	: 12 km
Nearest Railway Station	: Dadar (1.7 km)
Nearest Bus Stop	: Kapol Nivas on Dr. B.R. Ambedkar Road, Matunga (E), and Five Gardens Bus Stop
Land Mark	: Five Gardens, Matunga

Organizers

Course Director	: Dr. P. G. Patil, Director, ICAR-CIRCOT
Course Coordinators	: Dr. P. K. Mandhyan, Sr. Scientist & Head I/c., QEID
	Mr. A. Arputharaj, Scientist, QEID
	Mr. R. S. Prabhudesai, ACTO, QEID
	Mr. B. R. Pawar, ACTO, QEID

Address for correspondence

Dr. Ashok Kumar Bharimalla
I/cHead ,TTD, ICAR-CIRCOT,
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Designed by: Mrs. Laxmi Manoj Singh UP- 99, 330

एक्स-रे डिफैक्टोमीटर (एक्सआरडी) द्वारा सामग्रीयों का विशेषीकरण पर प्रशिक्षण Training on Characterization of Materials Using X-Ray Diffractometer (XRD)



December 27-29, 2018

Organized by

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

X-Ray Diffraction (XRD) is a high tech, non-destructive technique for analyzing wide range of materials. XRD analysis is based on scattering of monochromatic X-Rays when impinged upon a crystalline sample. Scattered X-Rays produces diffraction pattern consisting of a series of peaks and troughs that carry information about internal structure of materials under study. XRD testing provides information on structures, phases, preferred crystal orientations (texture), and other structural parameters, such as average grain size, crystallinity, strain, and crystal defects. X-Ray powder diffraction pattern is the fingerprint of periodic atomic arrangements in a given material and thereby enables quick phase identification for a large variety of crystalline samples. XRD finds critical applications in diverse areas of science and technology including geology, environmental science, material science, engineering and biology. This training programme intends to create knowledge on the XRD technique.

Objectives

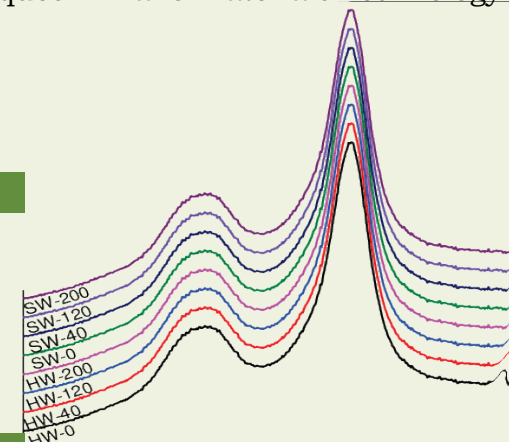
- To familiarise the trainees about principles of XRD analysis, XRD instrumentation and sample preparation
- To impart hands-on training on sample preparation, operation and analysis of samples on XRD

Course Content

- Principles of X-Ray Diffraction (XRD) analysis of materials
- Different types XRD instrumentation and its applications
- Preparation of sample for XRD Analysis
- XRD analysis of polymer materials
- Application X-Ray Diffraction techniques in Nano-Materials Technology
- Hands-on training on XRD

Facilities Available

- PANalytical X'Pert Pro MPD X-Ray Diffractometer
- Sample preparation aids



Date and venue

December 27-29, 2018 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 (A/c) shall be provided at standard rate on first-come-first-serve basis.

Fees

The programme fee is Rs. 30,000 + 18% GST per person. The charges include course fee, course material, breakfast, tea and working lunch. The fee does not include travel, lodging and conveyance and other personal expenses. There is 50% concession for students, academicians and participants from NARS.