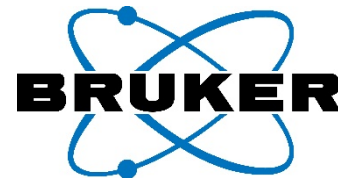


Central Research Facility, Indian Institute of Technology,  
Kharagpur  
and  
Bruker India Scientific Private Limited  
presents



**“Workshop on X-ray Diffraction Analysis using a 2D Detector”**

The Central Research Facility, Indian Institute of technology Kharagpur in association with Bruker India Scientific Private Limited is organizing a **workshop and hands-on training program** on **X-ray Diffraction Analysis using a 2D Detector** during 8<sup>th</sup> and 9<sup>th</sup> April 2021. The workshop aimed at developing understanding on basics of X-ray diffraction technique, raising awareness on the tools, and online demonstration of the equipment will also be delivered. The outcome of the workshop is important to the material science and life science community of the institute to understand the structural details of materials/devices. In this workshop a hands-on training program will also be organized to analyze the data using the available software with a few examples of analysis of common materials.

**Date: 8<sup>th</sup> April, 2021 – 9<sup>th</sup> April, 2021**

**No registration fee. Members willing to attend the workshop physically/or virtually, are requested to send email to [2dxrdcrfiitkgp@gmail.com](mailto:2dxrdcrfiitkgp@gmail.com) for registration. The link for the workshop is: [meet.google.com/dxr-dzph-tnt](https://meet.google.com/dxr-dzph-tnt). Certificates will be provided to the registered participants after successful completion of the workshop.**

**Venue: Seminar Room of the Central Research Facility (for participants who will be attending, physically)**

8 <sup>th</sup> April, 2021	Time	Topic	Speaker
Inaugural Session	10:00- 10:10	Welcome address	Prof Jyotsna Dutta Majumdar
	10:10 - 10:20	Address from Bruker India Scientific Private Limited	Dr. Ravikumar Iyyamperumal.
	10:20 - 10:40	Opening Remarks and Inauguration of D8 Discover	Prof. Khanindra Pathak DEAN, Infrastructure
Session-I	11:00 – 11:30 AM	Introduction to features of D8 Discover Micro-Diffraction XRD Instrument at CRF	
	11:35 AM- 12:05 PM	Data collection and analysis for different type of sample	
	12:10-12:40 PM	Residual stress and Texture analysis	
	12:40-2:00PM	Lunch Break	

Session-II	2:00-3:00 PM	Online demonstration of the facility
	3:00-6:00 PM	Hands-on training for selected staff members
9 <sup>th</sup> April, 2021		
Session- III	10:00-10:30 AM	Micro- Xray Diffraction
	10:35-11:05 AM	X-ray reflectivity
	11:10-11:40 AM	High Resolution X-ray Diffraction
	11:45 AM- 12:15 PM	Reciprocal space mapping
	12:15-2:00 PM	Break
Session- IV	2:00-3:00 PM	Online/ offline demonstration of software
	3:00-5:00 PM	Hands-on training for selected staff
5.00 to 5.15 PM		Concluding Remarks

**ALL ARE WELCOME THROUGH VIDEO CONFERENCE  
OR PHYSICALLY**