



Central Research Facility, Indian Institute of Technology, Kharagpur



And

Icon Analytical Equipment Private Limited and Physical Electronics

Organizes

Workshop and Online Training Program on X-ray Photoelectron Spectroscopy

15th July to 17th July, 2021

The Central Research Facility, Indian Institute of Technology Kharagpur in association with Icon Analytical Equipment Private Limited and Physical Electronics is organizing a **Workshop and Online Training Program on X-ray Photoelectron Spectroscopy** during 15th to 17th July 2021. The workshop aims at developing understanding on basics of XPS and UPS, raising awareness on the tools, and online demonstration of the equipment. The outcome of the workshop is important to the material science and life science community of the institute to understand the chemical details of materials/devices. In this workshop, an online training program will also be organized to analyze the data using the available software with a few examples of analysis of common materials.

Date: 15th July, 2021 – 17th July, 2021

No registration fee. Members willing to attend the workshop are requested to fill the google form from <https://forms.gle/9mWnSbySvcdkdvE96> for registration. The link for the attending workshop will be send through email. Certificates will be provided to the registered participants after successful completion of the workshop.

The last date of registration is 13th July 2021 24:00 Hrs.

15 th July, 2021	Time	Topic	Speaker
Inaugural Session	10:00- 10:10	Welcome address	Prof Jyotsna Dutta Majumdar
	10:10 - 10:20	Opening Remarks	Prof. Khanindra Pathak DEAN, Infrastructure
	10:20 - 10:30	Application of XPS in polymeric materials	Prof. S. Chattopadhyay
	10:30 - 10:40	Application of XPS in Ceramic and Advanced Materials	Prof. D. Pradhan
	Tea Break		

	11:00 – 12:30	Presentation on PHI VERSA PROBE – III XPS instrument	Wolfgang Betz, Director, Physical Electronics, USA
	Lunch Break		
Session-I	14:00-15:00	Online Demonstration of System and Basic of XPS techniques and understanding the system.	
	15:00-16:00	Sample Handling and Sample Insertion and Sample Platen type Precaution	
	16:00-17:00	Smart Soft™ for <i>Versa Probe III</i>	
16 th July, 2021			
Session- II	10:00-11:00	Small area vs. large area acquisition, Multi-point acquisition	
	11:00-12:30	Queue setup for automated analysis, Argon ion sputter depth profile	
	12:30-14:00	Lunch Break	
Session- III	14:00-15:00	Scanning X-ray Linescan, Scanning X-ray Maps	
	15:00-17:00	UPS data acquisition, Multipak	
17 th July, 2021			
Session- IV	10:00-11:00	Introduction to Cluster Gun ,Dual Anode	
	11:00-12:30	User interface overview and settings, Loading data files, Spectral Analysis	
	12:30-14:00	Lunch Break	
Session- V	14:00-15:00	Basic Chemical Analysis, Curve fitting	
	15:00-17:00	Linear Least Squares Fitting Spectral Deconvolution Depth profile data reduction Map data reduction Saving and exporting massaged data	
	17:00-17:15	Concluding Remarks	

ALL ARE WELCOME THROUGH VIDEO CONFERENCE