

Centre for Research in Nanotechnology & Science Sophisticated Analytical Instrument Facility IIT Bombay

Webinar on Basics of EDS & WDS



Mr. Mangesh D. Kulkarni Country Manager with INDIA office of OXFORD Instruments-UK.



24th August 2020 (Monday)



11:00am-12:00noon (IST)



Platform (Microsoft Teams)

Abstract:

Energy-Dispersive X-ray Spectroscopy (EDS) and Wavelength-Dispersive X-ray Spectroscopy (WDS) are the Electron probe X-ray microanalysis techniques available for elemental analysis. They use the characteristic X-rays generated from a sample bombarded with electrons to identify the elemental constituents comprising the sample. Both techniques generate a spectrum in which the peaks correspond to specific X-ray lines and the elements can be easily identified. Quantitative data can also be obtained by comparing peak heights or areas in the unknown with a standard material. Of the two methods, EDS is more commonly employed. Data collection and analysis with EDS is a relatively quick and simple process because the complete spectrum of energies is acquired simultaneously. By contrast, with WDS the spectrum is acquired sequentially as the full wavelength range is scanned. Although, it takes longer to acquire a full spectrum, the WDS technique has much improved resolution compared to EDS.

Free Registration link:

https://forms.office.com/Pages/ResponsePage.aspx?id=90UQLNVzUWK4oJL6legdUZKVNWFp0FFugb0CJ8S8hUM1c3MDI5TUdEMEtFVEs1UFpENzRYSUdBOC4u

Organizer: Prof . Anil Kottantharayil Head, Department of SAIF/CRNTS,IIT Bombay. For queries email id: workshop.crnts@iitb.ac.in

Coordinator: Ms. Aradhana P. Naudiyal with Electron Microscopy Webinar Team.