

WORKSHOP ON SPECTROSCOPIC METHODS AND CHARACTERIZATION TECHNIQUES

Date: 16/04/2020

Organizing Department: Department of Chemistry

Mode: Online

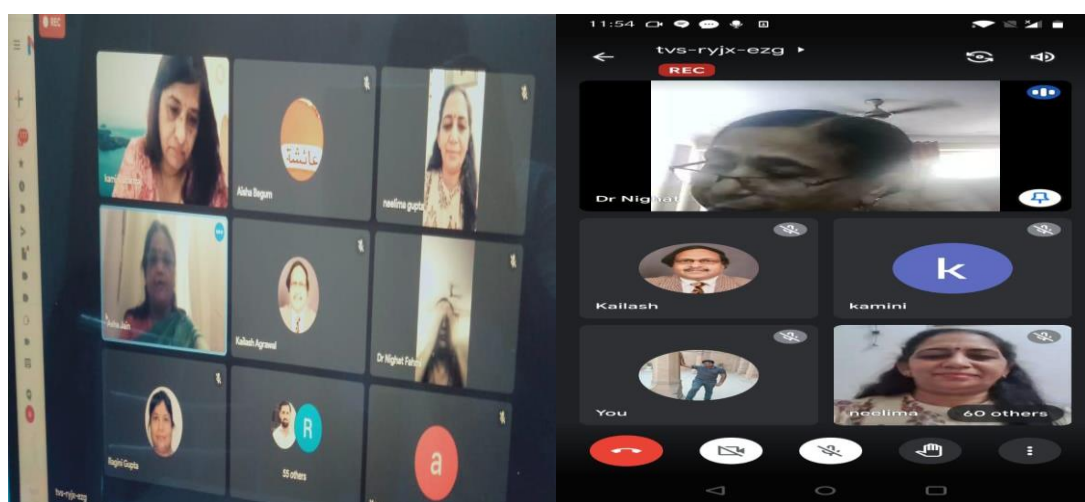
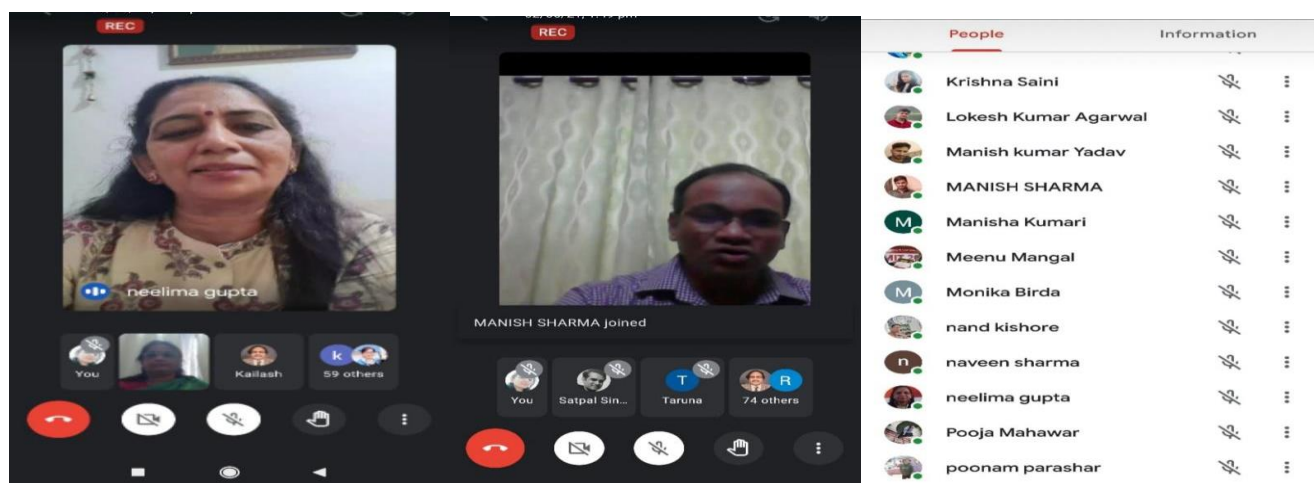
No. of Participants: 45

Duration of Event: Seven hours

Resource Persons: Prof. (Dr.) Neelima Gupta - Professor, Department of Chemistry, Rajasthan University, Prof. (Dr.) Abhinav Kumar - Associate Professor, Department of Chemistry, University of Lucknow and Prof. (Dr.) Ragini Gupta - Head Department of Chemistry, MNIT Jaipur

Coordinator Name: Prof. (Dr.) Menka Bhasin

Event Platform: Webex, CISCO



Workshop under progress and various participants

Brief Report

The objective of the workshop was to provide an opportunity to the participants to upgrade their knowledge and skills in research methodology, specially to disseminate knowledge about the various surface sensitive characterization techniques such as FESEM, TEM, X-ray,

Photoelectron Spectroscopy (XPS), Auger Electron Spectroscopy (AES), Rutherford Backscattering Spectrometry (RBS). The aim of the workshop was to introduce participants to these surface spectroscopic methods and characterization techniques so that they can use this information to characterize their samples. In addition to the fundamental knowledge, technical aspects and practical problems were also discussed during the workshop. Total three sessions were conducted in the one day workshop.

Session-I of the workshop commenced with the warm welcoming of Prof. (Dr.) Neelima Gupta from University of Rajasthan. She discussed fundamental concepts and details of field emission scanning electron microscopy (FESEM) and X-ray Photoelectron Spectroscopy - Qualitative and quantitative analysis.

Session-II started with the next distinguished lecturer by Prof. (Dr.) Abhinav Kumar, Associate Professor, Department of Chemistry, University of Lucknow. He started the session by introducing characterization and depth profiling by Auger Electron Spectroscopy and explained systematically about Rutherford Backscattering Spectroscopy.

In **Session-III** distinguished speaker Prof. (Dr.) Ragini Gupta, Head Department of Chemistry, MNIT Jaipur, spoke about material surfaces - interfaces and their characterization. In addition to fundamental knowledge, an interactive session was held on characterization of surfaces in characterization techniques.

The workshop ended with a lot of queries of students being answered successfully. Dr. Sunita Bishnoi presented a vote of thanks to the distinguished speakers.