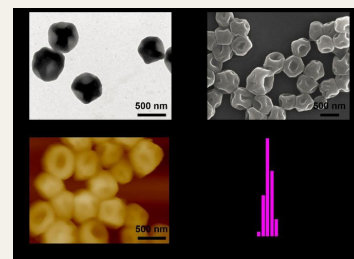


Brings
SUMMER TRAINING
ON



**INSIGHTS INTO FUNDAMENTALS OF
SPECTROSCOPIC & MICROSCOPIC TECHNIQUES**

**UNDER THE AEGIS OF
DBT STAR COLLEGE SCHEME & IQAC**

IN COLLABORATION WITH IIT DELHI PMRF SCHEME

PATRONS

PROF. ANJU SRIVASTAVA
PRINCIPAL,
HINDU COLLEGE

PROF. REENA JAIN
DBT STAR COORDINATOR,
HINDU COLLEGE

CONVENOR

DR. DEVANSHI MAGOO
DBT STAR COORDINATOR,
DEPARTMENT OF CHEMISTRY

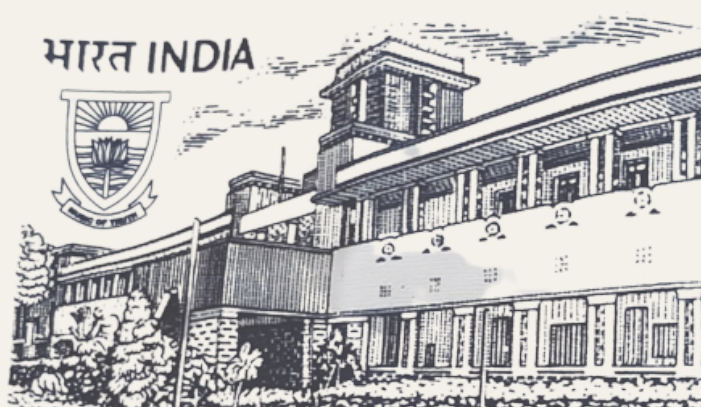
**1st June– 30th June
2023**

**Venue:
Hindu College**

COORDINATORS

**DR. DINESH KUMAR
DR. SRIPARNA DUTTA
DR. SUSHMA YADAV**

• For Registration – [**Click here**](#)



ABOUT THE TRAINING PROGRAMME

Topics covered in the summer training are packed with analytical techniques useful in research work. Part-I of the training would shed fundamental insights on various surface analysis (Raman, XPS and microscopic techniques) in which through topographical as well functional nature of different types of molecules will be discussed. This would include case studies curated from peer-reviewed papers for the best understanding. In the electron microscopic techniques, the basic working principles and features of SEM for microstructural and surface morphology examination. XPS is a non-destructive technique that provides important information about the chemical and electronic properties of the sample surface, allowing for detailed analysis of the composition and surface properties of materials. Raman spectroscopy is an effective analytical method that offers important insights into the molecular structure and composition of materials. This non-destructive method is used in a variety of scientific fields and is an invaluable resource for researchers and analysts who want to comprehend the workings of the molecular world. Part-II would deliver the basics of NMR spectroscopy with special emphasis on the applications of NMR in research as well as in real life. Apart from this, fundamental insights would be shed on IR, UV-VIS and Fluorescence spectroscopic techniques. IR will be used for structural characterization based on vibrational features of functional groups present in the molecule. UV-VIS Spectroscopy provides a simple and fast technique for qualitative and quantitative estimations covering a large number of application areas. Fluorescence spectroscopy provides emissive characteristics depending on the molecular structure and cybotactic region. This training programme covers the hands-on sessions also for sample preparation, data analysis and data processing using spectroscopic instruments & softwares. We hope that all the participants will be able to apply this knowledge to the research areas they are interested in and develop their workflow in future.

EDUCATORS

PROF. ANJU SRIVASTAVA, PROF. REENA JAIN, DR. DEVANSHI MAGOO,
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