



SRM
UNIVERSITY AP
Andhra Pradesh

**Office of Dean Research
organises**

Users Meet on X-Ray Diffraction Technique



June 18 & 19, 2025



**V-104, Vikram Sarabhai Block,
SRM University-AP**

Programme Objectives:

The primary objective of a Powder X-ray Diffraction (PXRD) User's meet is to provide participants with a comprehensive understanding of PXRD techniques, data collection, and analysis. These workshops typically focus on:

- **Structural Analysis:** Understanding crystal structures and phase composition of materials.
- **Material Characterisation:** Learning how PXRD is used in fields like materials science, chemistry, and pharmaceuticals.
- **Hands-on Training:** Practical sessions on data interpretation using specialised software like Highscore Plus
- **Advanced Techniques:** Exploring methods such as Rietveld refinement for qualitative and quantitative analysis.

Target Audience:

Faculty members and researchers (Postdoctoral fellow, PhD students, Final year M.Tech and M.Sc. students) interested in characterisation using XRD.

Programme Schedule Day - 1

9:30 AM	Registration & Welcome • Introduction to the workshop
10:30 AM	Tea Break
11:00 AM	Talk on "Introduction and Applications of XRD" by Dr L N Patro (Faculty-In-Charge XRD), Department of Physics
12:30 PM	Lunch Break
02:00 PM	Demonstration of Sample preparation and Instrument operation by Mr Ch Srinivas (Technical Assistant-XRD)
04:30 PM	Snacks Break
05:00 PM	Day-1 Session Ends

Programme Schedule Day - 2

09:30 AM	Participants' Sample Measurements
10:30 AM	Tea Break
11:00 AM	Session on "Preliminary sample data analysis using HIGHSCORE PLUS" by Mr K Sumit (Student-In-Charge XRD)
12:00 PM	Participants' Discussion and Q&A session
12:30 PM	Lunch Break
02:00 PM	Central Research Facilities - Lab Tour
03:00 PM	Certificate Distribution
04:00 PM	Vote of Thanks & Feedback session
04:30 PM	Snacks Break
05:00 PM	Day-2 Session Ends (Workshop completes)

Research with SRMAP:

Participants will be encouraged to submit a research project to Office, Dean Research, SRM University-AP utilising the characterisation techniques learned during the programme. Participants with selected research projects will be offered to utilise university research facilities with a discounted rate for 1 year through I-STEM portal.

Participants can utilise SRMAP transport services and limited campus accommodation (upon request) with prior approval by sending an email to coordinator.crfis@srmmap.edu.in (or WhatsApp message – 9563042194, 9000333521, 9290794479)