



ST. XAVIER'S COLLEGE, MAPUSA GOA

College with Potential for Excellence
Re accredited by NAAC with A Grade
Awarded DBT STAR College Scheme

Nature of Event (Workshop, Guest Lecture, Addon Course, Seminar, etc.)	Hands-on Session
Name of Department	Chemistry
Faculty Incharge	Ms. Janesline Fernandes Ms. Flavia S. Travasso Dr. Sudarshana Mardolkar
Stratum of Event (College, State, Regional, National)	College
Title of Event	Hands-on Training on sophisticated Instruments and Introduction to Computational Chemistry and Data Science: XRD Training Session
Date of Event	14 th May 2022
Venue	Instrumentation Centre, St Xavier's College Mapusa-Goa
Resource Person details	Dr. Reshma Raut Dessai, Assistant Professor, School of Physical and Applied Sciences, Goa University
Objective/ Scope of Event	To provide students with basic knowledge of the working of an XRD instrument, sample preparation, sample analysis and data analysis using Origin 8 software.
Particulars of Event	The Department of Chemistry organised an XRD Training Session for the Third Year B. Sc. Chemistry Students on Hands-on Training on Sophisticated Instruments and Introduction to Computational Chemistry and Data Science as part of the Skill Enhancement Course funded by Department of Biotechnology, Government of India under the DBT Star College Scheme. During the training session, Dr. Reshma briefed the students about the generation of X-rays and the working principle of an X-ray Diffractometer. She also explained the use of Origin 8 software to plot the data obtained during the XRD analysis. She further went on to exemplify how this software can be used to calculate the crystallite size and lattice parameter. Dr. Reshma demonstrated to the participants the preparation of the sample for analysis and recording of the x-ray diffractogram for the same.
Outcome of Event	The hands-on training session was immensely beneficial to the students as they got an opportunity to learn about the working of an X-ray Diffractometer, sample preparation, sample analysis and data analysis using Origin 8 software.
Feedback	Well organized, good choice of resource person, very fruitful session.

Total No. of Participants

15 T. Y. B. Sc Chemistry Students

Photographs

