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, Add on Course, Seminar, etc.)	Hands-on Session
Name of Department	Chemistry
Faculty Incharge	Dr. Andrew D'Souza Mr. Clarence Rodrigues Dr. Nitesh Joshi
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: FTIR Spectroscopy Training
Date of Event	22nd October 2022
Venue	Instrumentation Hub, Post-Graduation Block, St Xavier's College Mapusa-Goa
Resource Person details	Dr. Daniel Coutinho Assistant Professor Department of Chemistry Carmel College of Arts, Science & Commerce for Women, Nuvem-Goa.
Objective/ Scope of Event	To provide students with basic knowledge of the location of absorption bands and the chemical bonds that cause these absorptions.
Particulars of Event	The FTIR training included a brief introduction on the Fundamentals of Molecular Spectroscopy by Dr. Nitesh Joshi, Assistant Professor, Department of Chemistry, St. Xavier's College, Mapusa-Goa. The FTIR Instrumentation training carried out by Dr. Daniel Coutinho, provided students and teachers with instructions on FTIR instrumentation, basic instrument maintenance, data acquisition software, sample preparation and the use of various accessories, enabling students and teachers to acquire good quality spectra by either reflectance or transmission. The FTIR instrument training also covered sample preparation of solids, liquids, and pastes for both reflectance (Universal Attenuated Total Reflectance UATR), and transmission studies.
Outcome of Event	The students learnt the most direct way to interpret an IR spectrum and how to compare an unknown spectrum with known reference spectra. Hands-on Interpretation exercises were carried out which focused on IR spectra and the chemical bonds present that cause an infrared absorption in a particular region of the spectrum.
Feedback	Very well organized, full of knowledge.

Total No. of Participants	78 Student participants + 09 Faculty members

Photographs