



**ST. XAVIER'S COLLEGE,
MAPUSA GOA**

Report of Activity conducted in the Academic Year 2025-26

Name of Activity (Workshop, Guest Lecture, Addon Course, Seminar, etc.)	Open Lab Day St. Xavier's College (Workshop)
Date/ Duration	17 th March 2026
Venue	Science department Laboratories and other college venues at St. Xavier's College
Name of Organising Cell	NA
In Collaboration with	NA
Name of Faculty Coordinator	Mr. Mahesh Nair, Assistant Professor, Dept. of Chemistry
Stratum of Event (College, State, Regional, National)	State Level
Resource Person details	NA
Report	<p>St. Xavier's College, as part of its National Science Day celebration, hosted an Open Lab Day to inspire interest in higher education in science. The event welcomed 214 students and 16 teachers from 11 different high schools and higher secondary schools across Goa. Coordinated by Mr. Mahesh Nair (Dept. Of Chemistry) and assisted by committee members Dr. Maria D'Souza, Dr. Suraksha Dongrekar, Dr. Seema Fernandes (Dept. of Botany) and Mr. Rahul Naik (Dept. of Mathematics) the program provided access to undergraduate-level laboratories and facilities and successfully bridged the gap between classroom theory and practical application through direct interaction with faculty and college students.</p> <p>The day featured a diverse array of hands-on demonstrations spanning multiple scientific disciplines. In the tech and electronics sectors, students observed a Fire Fighting Robot designed to autonomously detect and extinguish small fires using sensor-based control, an innovative Deep Learning System for detecting adulteration in black pepper powder. Students engaged with a Gesture-Based Sound System, a proximity-sensing Smart Dustbin, and an IoT-based Rock-Paper-Scissors Robot. Modern computing was showcased through "Virtual Advocate," an AI-driven legal platform, and "Kitchen Bash," a Python-based game used to teach core</p>

	<p>programming concepts.</p> <p>Mathematical and physical principles were brought to life through The Chaos Game, the Monty Hall Problem, and demonstrations of electromagnetic waves and high-powered telescopes.</p> <p>Biological and chemical sciences were equally represented with interactive experiments that captivated the young audience. Students participated in creating synthetic blood for forensic analysis and performed DNA extraction from bananas, tomatoes, and onions, later visualizing the results under a UV transilluminator. Models of prokaryotic and eukaryotic cells were on display besides corals, fossils and student made terrariums to emphasize sustainability & creativity. Chem Hang Man was a fun filled interactive game to test the Chemistry Vocabulary of participants.</p> <p>These activities were hosted by the departments of Biotechnology, Physics, Chemistry, Mathematics, Microbiology, Botany, Computer Science, and Electronics.</p> <p>The feedback from participants was overwhelmingly positive. Students Diya, Khushi, and Kraig described the experience as enriching and well-explained, expressing a strong desire for future events. Teachers accompanying the students specifically thanked the college management, noting that the "fantastic" presentations allowed their students to finally relate textual concepts to live experiments. Ultimately, the initiative left a lasting impression, successfully fuelling scientific curiosity in the future generation of learners.</p> <p>The institutions that participated in the Open Lab Day included St Ann's HS, Thivim, Shri Vijayanand HSS, Bicholim, Mandrem HS, St. Theresa's HS, Candolim, Saraswat HS, Mapusa, Rosary HSS, Navelim, St. Xavier's HSS, Mapusa, G.S. Amonkar Vidya Mandir HS, Mapusa, Holy Cross HS, Bastora, Keerti Vidyalay HS, Siolim and St. Britto's HS, Mapusa.</p>
Brochure/Poster	https://xavierscollegegoa.ac.in/wp-content/uploads/2026/03/Flyer-of-Open-Lab-Day-St.-Xaviers-College-Workshop.pdf
Photographs	https://xavierscollegegoa.ac.in/wp-content/uploads/2026/03/Photos-ofc-Open-Lab-Day-St.-Xaviers-College-Workshop.pdf
List of Participants with Signatures	https://xavierscollegegoa.ac.in/wp-content/uploads/2026/03/Attendance-Open-Lab-Day-St.-Xaviers-College-Workshop.pdf
Certificate	-NA-

