



PROCESS
INNOVATION
CENTRE



DEPARTMENT OF
SPECIALITY
CHEMICALS
TECHNOLOGY

UNDER-GRADUATE
LABORATORY

COURTESY



COLOURTEX INDUSTRIES PVT. LTD.



Department of Speciality Chemicals Technology,
ICT Mumbai



Research Laboratory



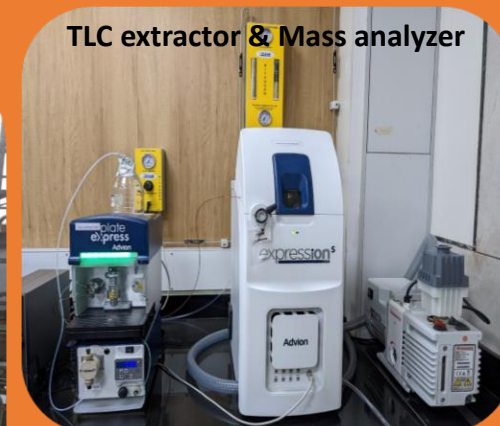
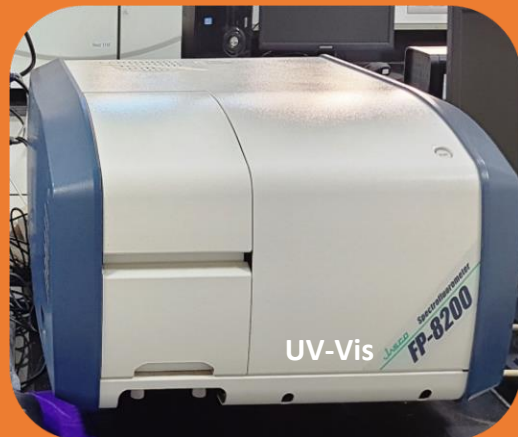
Analytical Laboratory



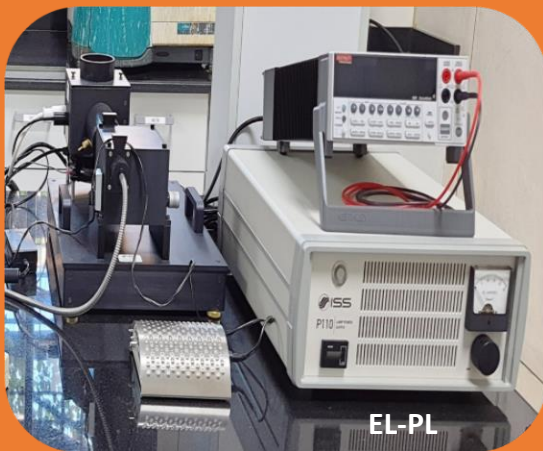
Pilot Plant



Instrumentation Laboratory



Analytical Instruments
Department of Speciality Chemicals Technology, ICT Mumbai



EL-PL



Four Point Probe Resistivity Measurement



Electrochemical workstation



ORR Assembly



Contact angle measurement



Hank machine



CVD

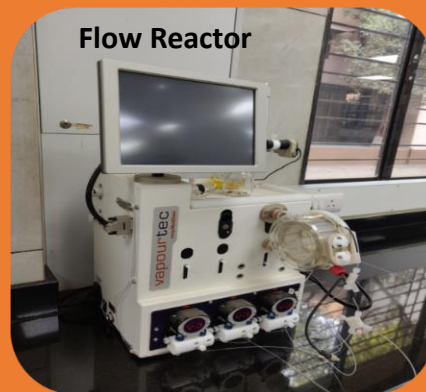
Analytical Instruments
Department of Speciality Chemicals Technology, ICT Mumbai



Fume hood



Flash Chromatography



Flow Reactor



Rotary Evaporator



Immersion chiller

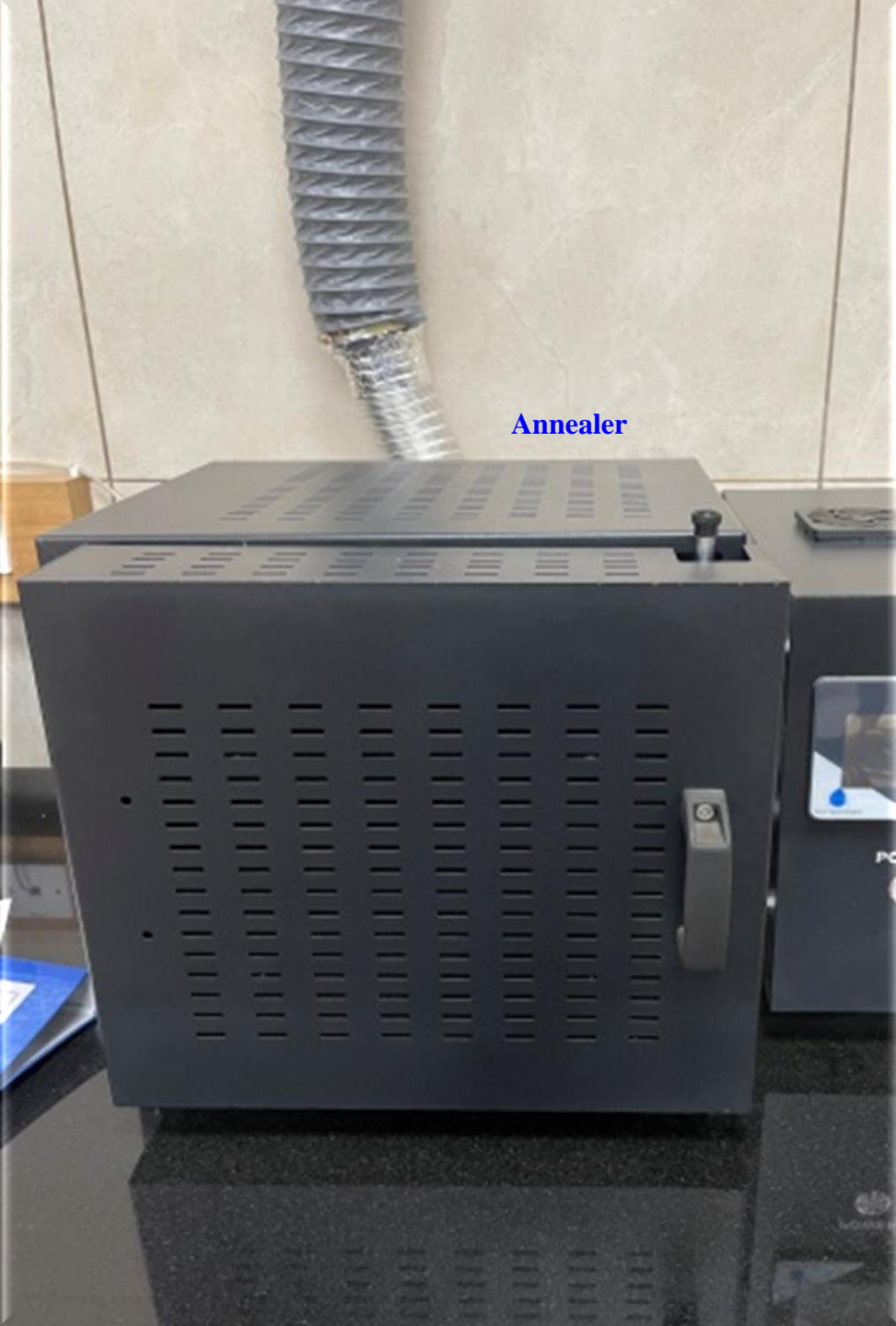


Freeze dryer



Probe sonicator

Laboratory facilities
Department of Speciality Chemicals Technology, ICT Mumbai

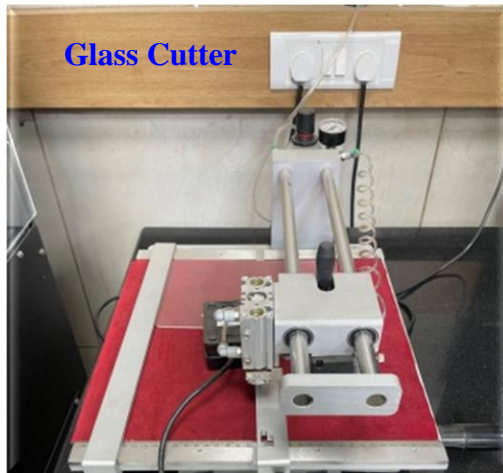


Annealer



TiO₂ Coater

Dye Sensitized Solar Cell (DSSC) Fabrication System



Glass Cutter



Solar Simulator



Fabrication System

500 MHz NMR with Autosampler Facility

Year: 2012

Make: Agilent Technologies



List of facilities available at the department of Speciality Chemicals Technology

Sr. No	Name of the Laboratory	Specialized Equipment Name	Equipment details
1	DRL	Autoclaves	Hastelloy – 300 mL, 1 lit
2	DRL	Autoclaves	SS 316 – 3 x 600 mL, 5 lit
3	DRL	Pressure reactor	-
4	DRL	Refrigerated & Heating Circulator	Julabo
5	DRL	Lyophilizer / Freeze dryer	-
6	DRL	Ice-Machine	-
7	DRL	Oven	-
8	DRL	Microwave reactors	-
10	DRL	Rotary evaporators	Heidolph
11	DRL	High vacuum	-
12	DRL	CVD furnace	-
13	DRL	Muffle furnace	Labline
14	DRL	Vaccum oven	Labline
15	DRL	High Temperature Furnace	-
16	DRL	Bath Sonicator	-
17	DRL	Probe Sonicator	-
18	DRL	Weighing Balance	-
19	DRL	DI water system	MO-K-3
20	DRL	Centrifuge machine	-
21	DRL	Water bath shaker	-
22	DRL	Tube furnace	-
23	DRL	Ultra sound reactor	-
25	New Dyes Building	Dye Sensitized solar cell	Exilir Technologies
26	New Dyes Building	Electroluminescence- photoluminescence	Sinsil International
27	New Dyes Building	Flow reactor	E-series easy medchem reactor/ vapourtec/SR.S1227/D3133
28	New Dyes Building	IR spectrophotometer ATR	Alpha-II/ Bruker-Labindia
29	New Dyes Building	Probe Sonicator	VCX-750-220/Ultra sonics processor
30	New Dyes Building	TLC Extractor and Mass analyser	Expressions/Advion

Safety Measures

Sr. No.	Name of the Laboratory	Safety measures
1	Instrument laboratory (DYP1007, DYP 1008)	An elephant trunk exhaust system: It is a flexible duct or hose connected to an exhaust system to collect solvent vapours or other contaminants.
2	Research lab (DYP1004, DYP1009, DYP1007, DYP1008)	Fume hoods, fire extinguisher, eye splasher, shower, fume detector, CCT camera, fire proof safety cabinet, fire alarm, emergency exit door.
3	Analytical laboratory (DYP1001, DYP 1002, DYP1003)	Fire extinguisher, smoke detector, fire alarm, emergency exit door, CCTV camera
4	NMR laboratory	Smoke detector, fire alarm, fire extinguisher
5	Process intensification laboratory	Smoke detector, fire alarm, fire extinguisher



Emergency Eye Washer and Safety Shower

Laboratory Fire Safety System

First Aid Kit

Computational Facilities

Information Processing
Centre (IPC)- ICT Mumbai



Departmental
Facility

