

List/Status/Incharge of Sophisticated Instruments available in Dept. of Chemistry, IIT Guwahati

Dated: 29/05/2023

Sr. No.	Equipment	Installation / Year of purchase	Status	Technical staff In-charge	Faculty In-charge	Remarks / Update (if not working)
1.	Multichannel Electrochemical Workstation Make: Metrohm Autolab Model: Autolab M204	2023	Functioning	BLD	CM	KKS
2.	Double Beam UV-Visible Spectrophotometer (Solid & Liquid) Make: PerkinElmer Model: Lambda 365+	2023	Functioning	BLD		KKS
3.	Analytical HPLC with all Accessories Make: Thermofisher Model: Vanquish	2022	Functioning	BLD		KKS
4.	Modular Circular Polarimeter Make: Antonpaar Model: MCP 5100	2022	Functioning	AMB		AMB
5.	Single Crystal X-ray Diffractometer system Make: Bruker Model: D8 Quest	2021	Functioning	BLD	CM/GD	KKS
6.	500 Hz NMR Spectrometer Make: Bruker	2020	Functioning	II	AKS/TP	
7.	Refrigerated Centrifuge with accessories Make: Eppendorf Model: 5910R	2019-20	Functioning	BLD	DM/AC	LN
8.	ICE FLAKER MACHINE Make: SIMAG Model: SPR200 (Cap. 200 Kg)	2019-20	NOT Functioning	BLD	KPB	LN

9.	UV-Visible Spectrophotometer Make: Hitachi Model: U-2910	2018-19	Functioning	AG	UM	
10	Fluorescence Spectrophotometer Make: Horiba Model: Fluoromax -4C	2018-19	Functioning	BLD	ASA	KKS
11	UV-Visible Double Beam Spectrophotometer Make: Agilent Model: Carry 100	2018-19	Functioning	BLD	KM	KKS
12	Ice Flaking Machine Model: IFM-150-Flake	2018-19	NOT Functioning	BLD	ASA	LN
13	FTIR Spectrophotometer Make: PerkinElmer Model: Spectrum Two (02 Nos.)	2018-19	Functioning	BLD		KKS
14	Atomic Force Microscope, Make: Oxford Instruments	2018-19	Functioning	AMB	PKI	Procured under the MHRD-FAST project
15	Gas Chromatography System Make: PerkinElmer Model: Clarus 590	2017-2018	Functioning	AMB	AD/KM	
16	Solvent Purification System Make: MBraun Model: SPS-800	2017-2018	Functioning	-	PKK	
17	Pressure Vessel Systems 50 ML Make: Parr Instrument Company, USA Model: 4792 (VGR)	2017-2018	Functioning	-	AKAS	
18	High Speed Refrigerated Centrifuge	2017-2018	Not	BLD	DM	LN

	Make: Harmle Model: Z36 HK		Functioning			
19	Ozone Generator and Oxygen Flow Regulator Make: Eltech Model: EI-OZ-O-25 gm/hr	2017-2018	Functioning	-	SCP	
20	Digital SMU with Potentiostat Make: Keithley Model: 2450 EC	2017-2018	Functioning	-	KR	
21	BENCH TOP ION METER Make: Thermo Scientific Model: Orion Star A214	2017-2018	Functioning	BLD	DM	AMB
22	Automatic Potentiometric Titrator Make: Metrohm AG	2017-2018	Functioning	KKS	CM	
23	400 MHz Bruker NMR Make: Bruker Model: AVANCE	2017-2018	Functioning	II	TP/AKS	Procured under the MHRD-FAST project
24	BENCH TOP CASCADE FREEZE DRYER SYSTEM MAKE: LABCONCO CORPORATION, USA, MODEL: FREEZONE 4.5 LITER BENCHTOP FREEZE DRY	2016-2017	Functioning	BLD	KR	SKM
25	INVERTED LED MICROSCOPE FOR BRIGHTFIELD, DIC, LED FLUORESCENCE WITH 5MP CCD CAMERA Make: Nikon Model: ECLIPSE Ts 2R-FL	2016-2017	Functioning	BLD	UM	LN
26	Computer Cluster Master Node : HPDL380 GEN8 Computer Node: P proliantXL 170 GEN	2015-2016	Functioning	AG	ANP/SP	Department + FIST Grant

	Chasis : HP Appollo 6000 24 port 36U Rank					
27	Ice Machines (03 + 02 Nos.) Make: SIMAG & Monotowec	2015-2016	NOT Functioning		KPB	LN
28	Semi preparative HPLC system (Make: Thermo, Model: Ultimate 3000)	2014-2015	Functioning	BLD	DPD	DH
29	TCS PC Lifetime system with MCP detection (Make: Hariba Jobin, Model: Ultrafast-01-DD)	2014-2015	Functioning	II	KS	
30	Circular Dichroism Make: Jasco Model: J-1500	2014-2015	Functioning	BLD	BHM	Procured under DST-FIST 2008 KKS
31	Multifunctional Copy/Print/Scan/Fax Machine Make: Kyocera, Model: TA-3551 ci	2014-2015	Functioning	-	CH101 Coordinator	
32	FTIR Spectrophotometer (Make: PerkinElmer, Model: Spectrum Two)	2013-2014	Functioning	BLD	CM/BM	KKS
33	Microwave Reactor (Make: CEM Corporation, Model: Discover Labmate)	2013-2014	Functioning	BLD	LMK/CKJ/SPB	ABH
34	Steady State Fluorescence Spectrophotometer (Make: Horiba, Model: Fluoromax -4P)	2016-2017	Functioning	BLD	GK/KS/KR	One is NOT working, Engineer will visit soon

						KKS
35	Steady State Fluorescence Spectrophotometer (Make: Horiba, Model: Fluoromax –4C)	2013-2014	Functioning			KKS
36	Steady State Fluorescence Spectrophotometer (Make: Horiba, Model: Fluoromax –4)	2012-2013	Functioning			KKS
37	Steady State Fluorescence Spectrophotometer Make: Horiba, Model: Fluoromax-4	2009-2010	Functioning			KKS
38	Nano particle Size, Zeta Potential, Molecular weight and the measurement facility of zeta-potential of solid surface, Make: Malvern , Zetasizer Nano ZS90)	2013-2014	Functioning	BLD	DPD	LN
39	Elix 3 and Milli Q Ultrapure Water Purification System, Make: Millipore, Model: Elix 3 & Milli Q	2011-2012	Functioning	SKM	KR/SC	
40	Bench-Top Powder X-ray Diffractometer Make: Bruker , Model: D2 Phaser	2010-2011	Functioning	BLD	SPB	KKS
41	UV-Visible-NIR Spectrophotometer Make: PerkinElmer , Model: Lambda 750	2010-2011	Functioning	BLD	CM	Solid sample Not working
42	PC controlled Double beam UV-Visible Spectrophotometer (05 Nos.) Make: Shimadzu, Model: UV-1800	2010-2011	Functioning	AG	CM	01 Not working

43	Double Beam UV-Visible Spectrophotometer Make: PerkinElmer Model: Lambda 25	2009-2010	Functioning	BLD	KM	KKS
44	Differential Scanning Calometry (DSC) Analyzer Make: TA Instruments, Model: Q20	2009-2010	Functioning	BLD	ASA	KKS
45	Olympus Upright Research Microscope Make: Olympus , Model: BX-51	2009-2010	Functioning	BLD	UM	KKS
46	Magnetic Susceptibility Balance (03 Nos.) Make: Sherwood Scientific, Model: Mark-1	2000, 2009-2010	Functioning	BLD	MR	LN
47	Catalytic Hydrogenation	2022-23	Functioning	AMB	ASA	AMB

Responsibilities: Major and Minor instruments as mentioned below, B. Tech first year Lab

Major and Minor Instrument in-charge: K. K. Senapati

Major: Single Crystal X-ray Diffractometer system

Make: Bruker Model: D8 Quest

Minor:

1. Multichannel Electrochemical Workstation Make: Metrohm Autolab Model: Autolab M204;
2. Double Beam UV-Visible Spectrophotometer (Solid & Liquid) Make: PerkinElmer Model: Lambda 365+;
3. Fluorescence Spectrophotometer , Make: Horiba Model: Fluoromax -4C;
4. UV-Visible Double Beam Spectrophotometer , Make: Agilent Model: Carry 100
5. FTIR Spectrophotometer Make: PerkinElmer Model: Spectrum Two

6. FTIR Spectrophotometer Make: PerkinElmer Model: Spectrum Two
7. Circular Dichroism Make: Jasco Model: J-1500
8. FTIR Spectrophotometer (Make: PerkinElmer, Model: Spectrum Two)
9. Steady State Fluorescence Spectrophotometer (Make: Horiba, Model: Fluoromax –4P)
10. Steady State Fluorescence Spectrophotometer (Make: Horiba, Model: Fluoromax –4C)
11. Steady State Fluorescence Spectrophotometer (Make: Horiba, Model: Fluoromax –4)
12. Steady State Fluorescence Spectrophotometer (Make: Horiba, Model: Fluoromax-4)
13. Bench-Top Powder X-ray Diffractometer , Make: Bruker , Model: D2 Phaser
14. Double Beam UV-Visible Spectrophotometer , Make: PerkinElmer Model: Lambda 25
15. Differential Scanning Calometry (DSC) Analyzer, Make: TA Instruments, Model: Q20