

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

Sr. No.	Equipment	Installation / Year of purchase	Status	Technical staff In-charge	Faculty In-charge/ Indentor	Remarks / Update (if not working)
1.	Multichannel Electrochemical Workstation Make: Metrohm Autolab Model: Autolab M204	2023	Functioning	KKS	CM	
2.	Double Beam UV-Visible Spectrophotometer (Solid & Liquid) Make: PerkinElmer Model: Lambda 365+	2023	Functioning	KKS	DM	
3.	Analytical HPLC with all Accessories Make: Thermofisher Model: Vanquish	2022	Functioning	DH	DM	
4.	Modular Circular Polarimeter Make: Antonpaar Model: MCP 5100	2022	Functioning	KKS	SCP	
5.	Single Crystal X-ray Diffractometer system Make: Bruker Model: D8 Quest	2021	Functioning	KKS	CM/GD	
6.	500 Hz NMR Spectrometer Make: Bruker	2020	Functioning	II	AKS/TP	
7.	Refrigerated Centrifuge with accessories Make: Eppendorf Model: 5910R	2019-20	Functioning	KKS	DM/AC	
8.	ICE FLAKER MACHINE Make: SIMAG Model: SPR200 (Cap. 200 Kg)	2019-20	NOT Functioning	LN	KPB	
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	KKS	ASA	
11	UV-Visible Double Beam Spectrophotometer Make: Agilent Model: Carry 100	2018-19	Functioning	KKS	KM	
12	Ice Flaking Machine Model: IFM-150-Flake	2018-19	NOT Functioning	LN	ASA	
13	FTIR Spectrophotometer Make: PerkinElmer Model: Spectrum Two (02 Nos.)	2018-19	Functioning	AG		
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 Make: Hamle Model: Z36 HK	2017-2018		KKS	DM	
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	-	DM	
22	Automatic Potentiometric Titrator Make: Metrohm AG	2017-2018	Functioning	-	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	-	KR	
25	INVERTED LED MICROSCOPE FOR BRIGHTFIELD, DIC, LED FLUORESCENCE WITH 5MP CCD CAMERA Make: Nikon Model: ECLIPSE Ts 2R-FL	2016-2017	Functioning	LN	DM	
26	Computer Cluster Master Node : HPDL380 GEN8 Computer Node: P proliantXL 170 GEN Chasis : HP Appollo 6000 24 port 36U Rank	2015-2016	Functioning	AG	ANP/SP	Department + FIST Grant
27	Ice Machines (03 + 02 Nos.) Make: SIMAG & Monotowec	2015-2016	NOT Functioning	LN	KPB	
28	Semi preparative HPLC system (Make: Thermo, Model: Ultimate 3000)	2014-2015	Functioning	KKS	DPD	
29	TCS PC Lifetime system with MCP detection (Make: Hariba Jobin, Model: Ultrafast-01-DD)	2014-2015	Functioning	II	KS	
30	Circular Dichroism	2014-2015	Functioning	KKS	BHM	Procured under DST-

	Make: Jasco Model: J-1500					FIST 2008
31	Multifunctional Copy/Print/Scan/Fax Machine Make: Kyocera, Model: TA-3551 ci	2014-2015	Not Functioning	-	CH101 Coordinator	
32	FTIR Spectrophotometer (Make: PerkinElmer, Model: Spectrum Two)	2013-2014	Functioning	AG	CM/BM	
33	Microwave Reactor (Make: CEM Corporation, Model: Discover Labmate)	2013-2014	Functioning	KKS	LMK/CKJ/S PB	
34	Steady State Fluorescence Spectrophotometer (Make: Horiba, Model: Fluoromax –4P)	2016-2017	Functioning	II	GK/KS/KR	
35	Steady State Fluorescence Spectrophotometer (Make: Horiba, Model: Fluoromax –4C)	2013-2014	Functioning			
36	Steady State Fluorescence Spectrophotometer (Make: Horiba, Model: Fluoromax –4)	2012-2013	Functioning			
37	Steady State Fluorescence Spectrophotometer Make: Horiba, Model: Fluoromax-4	2009-2010	Functioning			
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	KKS	DPD	

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	KKS	SPB	
41	UV-Visible-NIR Spectrophotometer Make: PerkinElmer , Model: Lambda 750	2010-2011	Functioning	KKS	CM	Solid state analysis not working
42	PC controlled Double beam UV-Visible Spectrophotometer (05 Nos.) Make: Shimadzu, Model: UV-1800	2010-2011	Not functioning	AG	CM	
43	Double Beam UV-Visible Spectrophotometer Make: PerkinElmer Model: Lambda 25	2009-2010	Functioning	KKS	KM	
44	Differential Scanning Calometry (DSC) Analyzer Make: TA Instruments, Model: Q20	2009-2010	Not Functioning	--	ASA	
45	Olympus Upright Research Microscope Make: Olympus , Model: BX-51	2009-2010	Functioning	KKS	UM	
46	Magnetic Susceptibility Balance (03 Nos.) Make: Sherwood Scientific, Model: Mark-1	2000, 2009-2010	Functioning	--	MR	
47	Thermo Gravimetric Analyzer, Make: PerkinElmer, Model No.: TGA4000	2021	Functioning	KKS		
48	Differential Scanning Calorimeter, Make: Mettler-Toledo Model: DSC1	2013	Functioning	KKS	DM	
49	GCMS System, Model: G7082CW, Make: Agilent Technologies	2023		AMB	DS	
50	Fluorescence Spectrophotometer for Solid and Liquid Sample Make: Horiba, Model: Fluoromax plus		Functioning	KKS	DM	
51	HPLC system, Make: Agilent Model: 1260 Infinity II	2020	Functioning	KKS		

52	High Purity Nitrogen Generator, Make: Peak Scientific, Model: Genius1053	2024	Functioning	KKS	BHM	
53	De-humidifier, Make: Bry Air: Model: FBB600	2024	Functioning		DM	
54	Ice Flaker Machine (100 kg capacity) , Make: WENSAR LABMAN, Model: LMIF-100, Quantity: 02	2023	Functioning	LN	KPB	
55	Ice Flaker Machine (50 kg capacity) Make: WENSAR LABMAN , Model: LMIF 50 , Quantity: 01	2023	Functioning	LN	KPB	
56	Microwave Reactor, Make: CEM Corporation, Model: Discover Labmate			KKS		
57	Fuji 1000VA Minivet UPS_ 3 Nos	2024	Functioning	DKH	KR	
58	1 kVA on line UPS system_1 No	2022	Functioning	DKH		
59	5KVA	KL-B5-157	Functioning	DKH		
60	5KVA	KL-B5-159	Functioning	DKH		
61	5KVA	KL-B5-160	Functioning	DKH		
62	5KVA	KL-B5-162	Functioning	DKH		
63	5KVA	KL-B5-165	Functioning	DKH		
64	5KVA	UL-H6-283	Functioning	DKH		
65	10KVA	DS-B5-015	Functioning	DKH		
66	10KVA	DS-F8-047	Functioning	DKH		
67	2KVA	KL-A4-057	Functioning	DKH		
68	20KVA	89890005	Functioning	DKH		
69	20KVA	89890007	Functioning	DKH		
70	10KVA	OM12GHF-659	Functioning	DKH		
71	10KVA	AS12IHF-799	Functioning	DKH		

72	20KVA	4J343LXX25	Functioning	DKH		
73	6KVA	15D-9842	Functioning	DKH		
74	6KVA	15D-9843	Functioning	DKH		
75	5KVA	KL-B5-166	Functioning	DKH		
76	2KVA	OM12FBO-627	Functioning	DKH		
77	Nitrogen Generator system, make: Agilent		Not Functioning			Old HRMS component

Major and Minor Instrument: K. K. Senapati

Major: Single Crystal X-ray Diffractometer system

Make: Bruker Model: D8 Quest

Minor instruments:

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
16. High Purity Nitrogen Generator, Make: PeakScientific, Model: Genius1053