Central Research Facility (CRF)
KIIT Deemed to be University, Bhubaneswar

Sl. No.	Instrument	KIIT-University	Outside KIIT, Academic and Educational Institutions	Industries	Note
1.	**CHN Analyzer**	100	400	1000	Per sample
2.	**Micro-Raman Spectrometer**	5 0	250	1000	Per sample
3.	**Ion Chromatography**	100	200	1000	Per Ion
4.	**FE-SEM**	200 (Imaging +EDS analysis) 200 (Polishing) 150 (EBSD) 500(Analysis) 200 (TKD) Sputter coating – Charge Rs.20	700 (Imaging +EDS analysis) 300 (Polishing) 700 (Scan for 2hr) +350 for extra 1hr scan 1000 (Analysis) 1000 (TKD) Sputter coating – Charge Rs.20	2000 (Imaging + EDS analysis) 500 (Polishing) 1000 (Scanning) +500 for extra 1hr scan 1500(Analysis) 1500 (TKD) Sputter coating – Charge Rs.50	per sample

5.	**SEM**	100 (Imaging +EDS) Sputter coating – Charge Rs.50(for 1-3 sample) and Rs. 100(for 4-7 sample)	500 (Imaging +EDS) Sputter coating – Charge Rs.200(for 1-3 sample) and Rs. 400(for 4-7 sample)	1000 (Imaging + EDS) Sputter coating – Charge Rs.350(for 1-3 sample) and Rs. 600(for 4-7 sample)	per sample
6.	**Thermo Mechanical Simulator**	200	1000	3000	per sample
7.	**PXRD**	50	350	500	Per sample
8.	**AFM**	150	500	1000	Per sample
9.	**Liquid Chromatography Mass Spectrometry** (For measurement only)				
	LC (≤15min) (Extra charges @ 300/30min run) (For small/organic molecule)	350	450	1050	Per sample
	LCMS (≤15min) (Extra charges @ 300/30min run) (For small/organic molecule)	450	600	1200	Per sample
	LC-MS/MS (≤15min) (Extra charges @ 400/30min run) (For small/organic molecules)	600	900	1800	Per sample
	Metabolite Profiling (LCMS) (≤15min) (Extra charges @ 500/30min run)	3000	4000	9000	Per sample
	Metabolite Profiling (LCMS/MS) (≤15min) (Extra charges @ 500/30min run) Standards to be provided by the user	4500	6000	13500	Per sample
	Intact Mass of Proteins and Peptides (LCMS) (≤15min) and Mass Deconvolution	3000	4000	9000	Per sample

	(Per polarity per sample basis/measurement only)	Charges for analysis			
	Small/Organic Molecules Screening (LCMS)	50	150	300	Per suspect ion
	Small/Organic Molecules Screening (LCMS/MS)	75	200	400	Per suspect ion
10.	**Universal Testing Machine**	100	500	2500	Per sample
11.	**UV-Vis Spectroscopy**	Liquid-100 Powder/Film-200	Liquid-200 Powder/Film-400	Liquid-1000 Powder/Film-1500	Per sample
12.	**Spectroflurometer**				
	Excitation/emission Spectrum per scan	50	150	300	Per liquid sample
	Synchronous Scanning per scan	200	700	1400	Per liquid sample
	Excitation Emission 3D Matrix per scan	200	900	1800	Per liquid sample
	Quantum yield measurement (for liquid and solid sample only) per sample	500 (liquid) 700 (solid)	1500 (liquid) 1700 (solid)	3000 (liquid) 3200 (solid)	Per liquid sample
	Quenching studies (10 titrations) per sample	500	1500	3000	Per liquid sample
	FRET study (10 Scans) per sample	500	1500	3000	Per liquid sample
	Excitation/emission Spectrum per scan	100	300	600	Per solid sample
	Kinetics (per 30 minutes) per sample	200 (single point) 400 (scan)	400 800	800 1600	Per solid sample
	Lifetime (with 280nm LED)-Single experiment	500	1500	3000	Per solid sample

13.	**NMR**						
Experiment type	**Observe dNuclei**	**Solvent**	**KIIT-University(Rs)**	**Outside KIIT, Academic Institution (Rs)**	**Research Laboratory (Rs)**	**Industry (Rs)**	**Notes**
1D	^{1}H	CDCl3	100	350	500	1100	Per measurement
		Other solvent	150	350+ Solvent charge	500+ Solvent charge	1100+ Solvent charge	Per measurement

	^{13}C/DEPT	CDCl3	200	800/h	1200	1500/h	Per measurement
		Other solvent	250	800+ solvent charge	1200 + solvent charge	1500/h+ solvent charge	Per measurement
	^{31}P	CDCl3	100	400	750	1100	Per measurement
		Other solvent	150	350+ Solvent charge	750+ Solvent charge	1100+ solvent charge	Per measurement
	^{15}N	CDCl3	100	350	750	1100	Per measurement
		Other solvent	150	350+ solvent charge	750+ Solvent charge	1100+solvent charge	Per measurement
	^{19}F	CDCl3	100	350	750	1100	Per measurement
		Other solvent	150	350 + solvent charge	750 + Solvent charge	1100 + solvent charge	Per measurement
2D	All type experiments	Any solvent	500/h	1200/h	1800/h + solvent charge	3500/h+ solvent charge	Per measurement

	USER TYPE			
Name of the Test	**KIIT Users**	**Academic Institutions**	**Research Labor-atory**	**Industry**
Resilient modulus of Bituminous Mixtures by conducting Indirect Tension Test as per ASTM D4123	100	500	1000	2500
Bituminous Mixtures by conducting Indirect Tension Testas per ASTM D7369/AASHTO 322.	100	500	1000	2500
Resilient Modulus and Fracture Life of Hot Mix Asphalt by conducting 4-Point Bending Test as per EN 12697-24E	100	500	1000	2500

Stiffness of Hot Mix Asphalt by conducting Indirect Tension Test as per EN 12697-26C.	100	500	1000	2500
Stiffness of Hot Mix Asphalt by conducting 4-Point Bending Test as per EN 12697-26B	100	500	1000	3000
Dynamic Modulus, Flow Number, and Flow Time for Asphalt Mixtures Using the Asphalt Mixture Performance Tester (**AMPT**) as per AASHTO 378/TP 79.	100	500	1000	3000
Permanent deformation, Creep Strain, Creep Modulus, by Conducting Cyclic Compression Test as per EN 12697- 25B	100	500	1000	3000
Fatigue Life of Compacted Hot Mix Asphalt (HMA) subjected to Repeated Flexural bending as per AASHTO 321	100	500	1000	3000
Fatigue Failure of Compacted Asphalt Concrete Subjected to Repeated Flexural Bending as per ASTM D7460.	100	500	1000	3000
Fatigue Life of Hot Mix Asphalt by conducting 4-Point Bending Test as per EN 12697-24D	100	500	1000	3000
Flexural Strength and Fatigue Life of concrete or cement stabilized soil by conducting Four Point Flexure Test on 100mmx100mmx450mm and 75mmx75mmx300mm size sample	100	500	1000	2500