

No	Instrument	NANOCAT	Internal (UM)	Outsider (Gov)	Industry Price	Remark
1	Ball Mill Grinder	19	19	39	65	
2	BET Mesopore	n/a	n/a	259	279	Solid/Powder
3	BET Micropore	n/a	n/a	309	329	
4	Density Meter	19	29	75	150	Liquid
5	EDX	NA	NA	NA	NA	Solid & powder
6	Differential Scanning Calorimetry (DSC)	80	139	200	250	Solid & powder
7	Differential Scanning Calorimetry (In situ-DSC)	69	79	250	300	
8	Elemental Analyzer (CHNS)	n/a	n/a	239	259	Powder
9	Fourier Transform Infra Red (Ex situ-FTIR)	NA	NA	NA	NA	Solid Powder
10	Fourier Transform Infra Red (In situ-FTIR)	100	139	200	300	
11	Freeze Dryer	29	39	49	79	Pre-freeze samples at 80°C/Powder per vessel/per day
12	Freezer	5	5	10	15	Per day
12	Gas Chromatography (TCD-FID)	49	69	179	249	Liquid
		100	120	120	120	Additional charge for Standard calibration
13	Gas Chromatography (GC-MS)	59	69	199	249	
		100	120	120	120	Additional charge for Standard calibration
		20	30	50	50	Additional charge for injections
14	Gel Permeation Chromatography (GPC)	150	199	330	450	Liquid
15	Hall Effect	150	249	299	399	Solid, thin film
16	HPLC	39	59	169	215	Liquid, solid, powder
		39, 59	59, 99	159	169	Additional charge for injections
		100	120	120	120	Additional charge for Standard calibration
17	Ion Chromatography (IC)	39	59	99	129	Solid, liquid
18	Karl Fischer Coulometer (KF)	19	19	75	150	Liquid
19	Particle Size Distribution (PSD)	25	49	119	179	Liquid
20	PH Meter	7	9	14	19	Liquid
21	Raman Spectroscopy (RAMAN)	49	149	179	279	Per sample/per raw data, powder & thin film
		25	50	75	125	Additional scan/peak for the same sample
22	Rotating Pressure Vessel Oxidation Test (RPVOT)	649	699	1399	1499	Liquid
23	Surface Tension	25	49	110	150	Slurry
24	Scanning Electron Microscopy (FESEM)	100	179	329	389	Solid & powder
25	TPDRO	149	249	299	349	Powder
26	Thermogravimetry Analysis (TGA)	80	139	200	250	heating range < 600, Solid /powder
		160	199	250	400	heating range > 600
27	Thermogravimetry-Mass Spectroscopy (TG-MS)	109	119	250	300	heating range < 600 Solid/powder
		200	229	300	450	heating range > 600
28	UV Vis Spectroscopy (UV-VIS)	19	19	39	59	Liquid
		49/Hour				
29	Vibration Sample Magnometer (VSM)	99	119	149	199	Solid, liquid & film
30	X-Ray Diffraction (In situ-XRD)	300	399	449	499	Powder
		90	189	239	298	Without gas
		30	30	30	30	Additional per scan charge
		100	100	100	100	Additional MS result
31	X-Ray Diffraction (Ex-situ-XRD)	NA	NA	NA	NA	Solid, Powder & thin film
32	X-ray Fluorescence (XRF)	NA	NA	NA	NA	Solid, Powder & thin film
33	Zeta Potential (ZP)	28	46	116	166	Bring own cuvette, Liquid
		153	163	274	294	without own cuvette (price apply for the 1st sample only)

***All prices are subject to change * For result within 3 days consider as urgent and double price will be charge *Testing result depends on number of samples, instrument availability * Highlighted rows are for current functioning instrument.- If you are interested in using our service kindly contact: ts_nanocat@um.edu.my, Tel: 03-7967 6273**