

Emerging Life Sciences: Central Instrumentation Facility

Type of Service	Charges for GNDU campus and constituent colleges/regional centres		Charges for other academic institutes/ industries/R & D Labs		
	Including NMR tube, solvent (i)	Excluding NMR tube, solvent (ii)	Educational institutions (iii)	Industries (iv)	R & D Labs
NMR Spectrometer Bruker Avance HD III 500 MHz					
1H, 13C, DEPT experiment, 15N, 31P and all other nuclei (With all available solvents)	Rs. 100 per Spectrum or Rs. 100 per hour of instrument time whichever is more	Rs.40 per Spectrum or Rs. 40 per hour of instrument time whichever is more	Rs 200 per spectrum. Rs. 500 per sample for 1H, 13C, DEPT. Rs 200 for each additional spectrum	Rs 400 per spectrum. Rs. 800 per sample for 1H, 13C, DEPT. Rs 400 for each additional spectrum	Rs 300 per spectrum. Rs. 600 per sample for 1H, 13C, DEPT. Rs 300 for each additional spectrum
D₂O Exchange	Rs. 50 per Spectrum	--	Rs. 200 per Spectrum	Rs. 400 per Spectrum	Rs. 300 per Spectrum
2-D COSY, NOESY, ROESY, TOCSY, HMBC, HMQC including 1D expts required	Rs. 300 per Spectrum or Rs. 100 per hour of instrument time whichever is more	Rs. 100 per Spectrum or Rs. 40 per hour of instrument time whichever is more	Rs. 1000 per Spectrum	Rs. 2000 per Spectrum	Rs. 1500 per Spectrum
NMR Spectrometer JEOL 400 MHz					
1H, 13C, DEPT experiment, 15N, 31P and all other nuclei (With all available solvents)	Rs. 50 per Spectrum or Rs. 50 per hour of instrument time whichever is more	Rs. 20 per Spectrum or Rs. 20 per hour of instrument time whichever is more	Rs 150 per spectrum. Rs. 400 per sample for 1H, 13C, DEPT. Rs 150 for each additional spectrum	Rs 300 per spectrum. Rs. 500 per sample for 1H, 13C, DEPT. Rs 300 for each additional spectrum	Rs 200 per spectrum. Rs. 600 per sample for 1H, 13C, DEPT. Rs 250 for each additional spectrum
D₂O Exchange	Rs. 50 per Spectrum	--	Rs. 150 per Spectrum	Rs. 250 per Spectrum	Rs. 200 per Spectrum
2-D COSY, NOESY, ROESY, TOCSY, HMBC, HMQC including 1D expts required	Rs. 200 per Spectrum or Rs. 200 per hour of instrument time whichever is more	Rs. 50 per Spectrum or Rs. 20 per hour of instrument time whichever is more	Rs. 800 per Spectrum	Rs. 1500 per Spectrum	Rs. 1200 per Spectrum

Type of Service	Charges for GNDU campus and constituent colleges/regional centres		Charges for other academic institutes/ industries/R & D Labs		
			Educational institutions	Industries	R & D Labs
HIGH RESOLUTION LCMS/MS					
Direct Injection MS	Rs. 50		Rs. 500	Rs. 2500	1500
LCMS	Rs. 200 (LC protocol should be given)		Rs. 700	Rs. 4000	2500
UHPLC	Rs. 100		Rs. 500 per sample	Rs. 1500 per sample	1000
Ion Chromatography	200 per sample (either cation or anion column)		1000 per sample (either cation or anion column)	2000 per sample (either cation or anion column)	1500 per sample (either cation or anion column)
CHN Analysis					
C, H, N & S	Rs. 50 per sample		Rs. 600 per sample	Rs. 3000 per sample	Rs. 1500 per sample
ATOMIC ABSORPTION SPECTROMETER					
As, Ba, Cd, Cr, Hg, K, Mg Ni, Pb, Mn, Fe, Cu, Na, K, Zn, Co	Rs. 100 per Element per Sample. For As, Hg, K, Na and Mg: Rs 200 for each element		Rs. 200 per Element per Sample. For As, Hg, K, Na and Mg: Rs 400 for each element	Rs. 1000 per Element per Sample (including sample preparation)	Rs. 800 per Element per Sample (including sample preparation)
pH, alkalinity, hardness, Ca, Mg (titrometric), NO ₃ , PO ₄ , K, organic carbon, Na, turbidity, DO, BOD and COD	-		-	Rs 100 per each test per sample	
POWDER XRD					
Powder XRD	Rs. 30 per Spectrum or Rs. 30 per hour of instrument time whichever is more		Rs.350 per Spectrum	Rs.1500 per Spectrum	Rs.1000 per Spectrum

Type of Service	Charges for GNDU campus and constituent colleges/regional centres	Charges for other academic institutes/ industries/R & D Labs		
		Educational institutions	Industries	R & D Labs
ELECTRON MICROSCOPE				
(i) FESEM	100	800	2000	1500
(ii) FESEM + EDX	150	1000	2500	2000
(iii) FESEM + EDX + elemental mapping	200	1500	3000	2500
TEM (normal)	150	800	4000	2500
HRTEM	200	1000	4500	3000
SAED (extra)	50	300 per pattern	500 per pattern	400 per pattern
Confocal (per hour)	100	1000	4000	2000
Raman	30	500	1500	1200
Flow cytometer (per hour)	100	1000	2000	1500
ITC	50	500	1000	800
Amino acid analyzer	500	1000	2000	1500
Particle size analyzer	50 per sample	500 per sample	750	600
Zeta sizer	75 per sample	600	850	700
HPLC	50 per sample	250 per sample	1000 per sample	800 per sample
Rheometer	50 per sample	250 per sample	500 per sample	400 per sample
Spray drier	100 per sample or per hour	500 per sample	1000 per sample	800 per sample
Ellipsometer	30	500 per sample	1000 per sample	800 per sample
Cytogenetic workstation	500 per sample	1500 per sample	4500 per sample	4000 per sample
AFM	100	500	1000	800
UV-NIR	40	200	500	400
Dynamic Light Scattering	50	200	500	400
Vibrating stimulating magnetometer	100	500	1000	800

1. Mode of Payment

- (i) For samples outside the GNDU campus: Payment can be made in the form of DD drawn in favour of Registrar, Guru Nanak Dev University, payable at Amritsar. The sample/s in well sealed eppendorf tube/s along with the requisite information may be sent to Incharge, Emerging Life Sciences Guru Nanak Dev University Amritsar-143005.
 - (ii) For in-campus samples; Payment will be received in cash in the office of Emerging Life Sciences and a receipt will be given.
 - (iii) GST = 18% extra for outside samples.
2. For the NMR users under category (ii), time slot will be allotted every week and the machine will be operated by the group member/s who are trained for operating NMR spectrometer.
 3. For getting good HRMS, either provide pure solid/liquid compound or provide correct information for concentration. If providing solution of the compound, concentration should be at least 50 μM .
 4. Results will be available within One week of submitting the sample.
 5. Time slot for each machine depends upon the availability of the machine.