

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	Rs.40 per Spectrum	Rs 400 per spectrum. Rs. 700 per sample for 1H, 13C, DEPT. Rs 400 for each additional spectrum	Rs 400 per spectrum. Rs. 800 per sample for 1H, 13C, DEPT. Rs 400 for each additional spectrum	Rs 400 per spectrum. Rs. 700 per sample for 1H, 13C, DEPT. Rs 400 for each additional spectrum
D ₂ O Exchange	Rs. 100 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	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	Rs. 20 per Spectrum	Rs 300 per spectrum. Rs. 600 per sample for 1H, 13C, DEPT. Rs 300 for each additional spectrum	Rs 300 per spectrum. Rs. 700 per sample for 1H, 13C, DEPT. Rs 300 for each additional spectrum	Rs 300 per spectrum. Rs. 600 per sample for 1H, 13C, DEPT. Rs 300 for each additional spectrum
D ₂ O Exchange	Rs. 50 per Spectrum	--	Rs. 150 per Spectrum	Rs. 250 per Spectrum	Rs. 200 per Spectrum
2-D COSY, NOESY, ROESY, TOXCY, HMBC, HMQC	Rs. 200 per Spectrum or Rs. 200 per hour of instrument time	Rs. 50 per Spectrum	Rs. 800 per Spectrum	Rs. 1500 per Spectrum	Rs. 1200 per Spectrum

including 1D expts required	whichever is more			
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HIGH RESOLUTION LCMS/MS		Educational institutions	Industries	R & D Labs
Direct Injection MS	Rs. 200	Rs. 1000	Rs. 2500	1500
LCMS	Rs. 500 (LC protocol should be given)	Rs. 1500	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 500 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		
ELECTRON MICROSCOPE		Educational institutions	Industries	R & D Labs
(i) FESEM	100	800	2000	1500
(ii) FESEM + EDX	150	1000	2500	2000
(iii)FESEM + EDX + elemental mapping	200	1500	3000	2500
TEM (normal)	400	2500	4000	2500
HRTEM	500	3000	4500	3000
SAED (extra)	100	500 per pattern	500 per pattern	500 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
Microwave Plasma Atomic Emission Spectrophotometer (MP-AES)	200 per sample (Rs. 200 per sample for digestion and Rs 100 per sample for Filtration will be charged extra)	1000 per sample (Rs. 200 per sample for digestion and Rs 100 per sample for Filtration will be charged extra)	3000 per sample (Rs. 200 per sample for digestion and Rs 100 per sample for Filtration will be charged extra)	1500 per sample (Rs. 200 per sample for digestion and Rs 100 per sample for Filtration will be charged extra)

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.
 - (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) (Annexure-I): 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 μ M.
 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.