

**REVISED ANALYTICAL CHARGES AT THE LABORATORY FACILITIES OF THE WADIA  
INSTITUTE OF HIMALYAN GEOLOGY, DEHRADUN  
(w.e.f. 01-04-2016)**

ITEM OF ANALYSIS	Rates for Govt. Organizations & Universities (Rs.)	Rates for Pvt. Parties & Commercial Organizations (Rs.)
<b>1. SEM Lab.</b>	1000/-per hour.	2000/- per hour
<b>SEM with EDX</b>	1500/- per analysis	3000/-per analysis
<b>2. XRD Lab.</b>		
Identification of Minerals/sample	800/- for scanning of each sample.	1600/- for scanning of each sample.
<b>3. XRF Lab.:</b>		
Major elements (max. 10 radicals)	1000/- per sample	2000/- per sample
Trace elements	150/- per element (minimum charges Rs. 1000/- per sample)	300/-per element (minimum charges 2000/- per sample)
<b>4. ICPMS Lab.</b>		
REEs	2000/- per sample	4000/- per sample
Trace Elements	2000/-per sample (whether it is one element or set of elements)	4000/-per sample
<b>5. L.O.I.</b>	250/-per sample	500/-per sample.
<b>COMPLETE PACKAGE CONSISTING OF POWDERING, LOI, MAJOR, TRACE AND REEs USING XRF AND ICPMS:</b>	4000/- per sample	7000/- per sample

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<b>6. Water Chemistry Lab.:</b>		
Major anions using Ion-Chromatograph	1000/- per sample	2000/- per sample
Major cations using Ion-chromatograph	1000/- per sample	2000/- per sample
Bacteriological Analysis consisting of Total coliform E.Coli & S.Coli	2000/-per sample	4000/-per sample
Physical parameters (Temp., Cond., TDS pH & D.O.)	400/- sample	800/-per sample
<b>7. Thin Section Lab.</b>		
Ordinary Slide	150/-	250/-
Microprobe Slide	250/-	450/-
<b>8. Crushing of sample/ Powdering of sample</b>		
	150/- per sample	250/- per sample
<b>9. Sedimentology Lab.</b>		
Particle size analysis	1500/- per sample	3000/- per sample.
Vibratory sieve shaker	1000/-per sample	2000/- per sample
Preparation of clay slide	300/- per slide	750/- per slide
<b>10. Geotechnical Lab.</b>		
<b>Soil Testing:</b>		
Grain size distribution	1500/- per sample	3000/-per sample
Liquid limit and Plastic limit	5000/- per sample	7500/-per sample.
Direct Shear	7000/- per sample	10500/- per sample
<b>Rock Testing:</b>		
Unconfined compressive Strength	7000/-per sample.	10500/-per sample
Point load test	2000/- per sample.	3000/-per sample
Slake durability Index (5 cycles)	15000/-per sample	22500/- per sample
Ultrasonic velocity Determination (P & S waves)	10000/-per sample	15000/- per sample
Schmidt Hammer (Rebound value)	2000/-per sample	3000/-per sample

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11. EPMA Lab.	6000/-per hour (inclusive of sample coating).	10000/- per hour
12. TL/OSL Lab.	18000/- per sample	25000/- per sample
13. Fluid Inclusion Lab. (Data only)	8000/- per sample	10000/-per sample.
14. Raman Spectra Lab.	2500/-per analysis	4000/-per analysis
15. IRMS Lab.		
<b>I. Gas Bench</b> (for carbonate and water)		
a. $\delta^{13}\text{C} + \delta^{18}\text{O}$ (in carbonate)...	1000/per sample	2000/per sample
b. $\delta^{13}\text{C(DIC)}$ (in water).....	1000/per sample	2000/per sample
c. $\delta^{18}\text{O}$ (in water).....	1000/per sample	2000/per sample
d. $\delta\text{D}$ (in water).....	1000/per sample	2000/per sample
<b>II. Kiel Carbonate</b> (Ultimate Isotope Precision for Carbonates such as forums, enamel etc.)		
a. $\delta^{13}\text{C} + \delta^{18}\text{O}$ (in carbonate).....	1500/per sample	3000/per sample
<b>III. Elemental Analyzer</b> (Flash 2000) (for sediments)		
a. $\delta^{13}\text{C}$ (organic).....	1500/per sample	3000/per sample
b. $\delta^{15}\text{N}$ .....	1500/per sample	3000/ per sample
<b>IV. Laser Fluorination</b> (for silicate fraction)		
a. $\delta^{18}\text{O}$ (in silicate fraction).....	4000/per sample	8000/per sample

**16. Paleomagnetic Lab.**

S.No.	Analysis	Equipment used	Rates	
			Govt. Organizations & Universities	Others/Pvt. Organizations
1	Magnetic Susceptibility/remnant Magnetization	Bartington MS-2B/AGICO's KLY 3S/JR-6A/Molspin's Minispin	Rs.100/- each specimen	Rs. 200/- per specimen
2	Thermal demagnetization per Batch of ten specimens (includes remanence measurements)	JR 6 Magnetometer, Schonstedt Thermal Demagnetizer (TSD-2), Magnon's TD 700 with TRM facility	300/- per step upto 300°C and 400/- per step for >325 °C.	1000/- & 1500/- respectively for the same
3	AFD/IRM/ARM	Molspin/ASC Impulse Magnetizer	150/- each specimen	250/- for the same
4	AMS	AGICOI KLY-3S	150/-each specimen	300/- for the same
5	Data Processing and Computation	Set of 10 specimen for magnetostratigraphy/Environmental Magnetism/magnetic fabrics/palaeolatitudes	5000/-	15000/-
6	Data interpretation including data processing & computation	Each group of samples for magnetostratigraphy, environmental magnetism/magnetic fabrics	5000/-	30000/-
7	Oriented sample preparation	Drilling machine/dual blade saw/cutting table	200/-each specimen	500/-for the same
8	Hysteresis loop, IRM, back field, curie temp., Ramp	MMVFTB, magnetic measurements, UK	3000/- each specimen	5000/- for the same
9	Magnetic mineral separation	Isodynamic separator, Franz	300/- each specimen	600/- for the same

## 17. Rate list for Mineral Separation and Mounting Lab & LA-MC-ICPMS Lab

### A. Mineral Separation and Slide preparation per sample

S. No.	Analytical Procedure	Rate for Govt. Organizations & Universities (Rs.)	Rate for Pvt. Parties & Commercial Organizations (Rs)
1.	Sample reduction to 1" size (Hammering) and 1-2mm (Jaw Crushing)	500/-	1000/-
2.	Fine powdering to <500µm (Disc Mill)	500/-	1000/-
3.	Gravity separation in Wilfley Table:	200/-	400/-
4.	Magnetic Barrier Separation:	300/-	600/-
5.	Heavy Liquid separation:	1500/-	3000/-
6.	Picking of Good quality grains and Mounting (100 grains per sample):	1000/-	2000/-
7.	Polishing of each mounted slide	1000/-	2000/-
	<b>Package Rate: Total Rate for one slide preparation per sample (\$\$)</b>	5000/-	10000/-

Note: All the sample processing work will be done by the user that includes mineral separation, slide preparation etc. In case the sample processing is done by WIHG then the rates will be double.

### B. U-Pb LA-MC ICPMS Rates: When the sample is ready for analysis

S. No.	Analytical Procedure	Rate for Govt. Organizations & Universities (Rs.)	Rate for Pvt. Parties & Commercial Organizations (Rs)
1.	BSE @ CL imaging by SEM (Per Hour)	**/-	**/-
2.	LA-MC-ICPMS analysis per spot analysis including standard data processing	500/-*	1000/-*

\*Minimum of 25 spots to be charged

\*\*BSE & CL imaging by SEM: As per existing rates on per hour basis.

Package Rate: "**Rock to U-Pb Zircon Date**": Rs. 40,000/- per sample that includes minimum of 25 grains and 50 spots.

\$\$ We recommend at least 20 grains for igneous rocks and 50 grains per sample for detrital zircon study, provided there are enough zircon yield for about 5-6 Kg of sample. Sample must arrive at least 4 months prior to the schedule analytical session.

**RATES ARE EXCLUSIVE OF SERVICE TAX, WHICH WILL BE CHARGED EXTRA AS APPLICABLE.**