ASC Scientific Impulse Magnetizer

Make: ASC Scientific, USA

Model: IM-10-30 Impulse Magnetizer

Description:

The instrument generates short duration magnetic fields within the sample coil, enabling a variety of high-field magnetic studies to be conducted on geologic samples without the need for a large electromagnet. The IM-10-30 is ideally suited for imparting IRM into a sample and anisotropy of IRM acquisition studies. It has interchangeable coils and is capable of generating fields in excess of 28K Gauss for full size paleomagnetic specimens and 50 K Gauss for smaller samples. Four different plug-in coils are available with the capability of accurately generating fields ranging from 30 Gauss to 50 KGauss. Each coil comes with sample holders for accurately positioning and aligning the sample during field exposure.

Principle:

The magnetic field is produced by discharge of energy from a capacitor bank through a coil surrounding the sample cavity. The capacitor bank is first charged to the desired voltage (corresponding to the desired field). It is then discharged through the coil very quickly using a high capacity SCR as a switch. Because very high current levels are involved, the coil and all circuitry are totally contained in a single case.

Coil	Field Range	Sample Cavity	Sample Holder
#1	30 - 600 Gauss	2.00"	1" cubes/cores
#2	0.5 - 11 KGauss	2.00"	1" cubes/cores
#3	1.5 - 27 KGauss	1.25"	1" cores; 7cc sample boxes
#4	3 - 50 KGauss	0.5"	7/16" x 3/4"" vials/cores

User Instructions:

1. Each requisition should be addressed to **Director, BSIP** for allotment of analysis date
2. Payment is to be made in advance through bank draft in favour of "**Director, BSIP, Lucknow**". Kindly visit our website for the updated rate-list
3. Data generated will be provided on CD or DVD
4. Sediment/Soil samples should be fully packed in 10 cc plastic bottles

Contact Us:

Dr. Binita Phartiyal: binita_phartiyal@bsip.res.in; 9411856391(Lab Head)

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Analysis cost: See analytical cost list as attached below

बीरबल साहनी पुराविज्ञान संस्थान, लखनऊ
BIRBAL SAHNI INSTITUTE OF PALAEOSCIECES, LUCKNOW

बी.सा.पु.सं / वै.ग./परामर्शता/2023-24/ L – 1200

दिनांक

No.BSIP/SA/Consultancy/2023-24

Dated: 19.10.2023

अधिसूचना/NOTIFICATION

विषय : पैलियोमैग प्रयोगशाला हेतु वैश्लेषिक प्रभार (Analytical Charges for (Palaeomag Lab)

अध्यक्ष, शासी मंडल, बी.सा.पु.स. के अनुमोदन से उपर्युक्त प्रयोगशाला में तत्काल प्रभाव से तात्विक प्रभार निम्नवत हैं:-

Sl.No.	Analysis	Instrument(s)	Charges/specimen (Revised since 16/08/2023)			
			Students		Govt. Body (Univ./Institute)	Private Sector/Industry
1.	Magnetic Susceptibility (MS) (xIf, xhf, xfd%)	Bartington MS2B Sensor	Rs.50/-		Rs.65/-	Rs.130/-
2.	Magnetic Susceptibility (xIf, xhf, xfd%)	MFK2-FA-Kappabridge	Rs.75/-		Rs.100/-	Rs.200/-
3.	Field variation of MS (2A/m to 700A/M)	MFK2-FA-Kappabridge	Rs.175/-		Rs.250/-	Rs.500/-
4.	Temperature variation of MS(40-700 °C and cooling)	Bartington MS2WFP Sensor	Rs.500/-		Rs.750/-	Rs.1500/-
5.	Anisotropy of magnetic susceptibility (AMS)-Manual Mode-15 Direction	MFK2-FA-Kappabridge	Rs.250/-		Rs.350/-	Rs.700/-
6.	Anisotropy of magnetic susceptibility (AMS)-Auto mode with 3D rotator-64 Direction	MFK2-FA-Kappabridge	Rs.400/-		Rs.600/-	Rs.1200/-
7.	Magnetic Susceptibility whole core scanning (without splitting)	MS-2C sensor (Bartington)110 mm dia	Rs.1000/- Every 1 m of core		Rs.1500/- Every 1m of core	Rs.3000/- Every 1m of core
8.	Magnetic Susceptibility split core scanning	MS-2E sensor (Bartington)25 mm dia	Rs.1500 /- Every 1 meter core		Rs.2500/- Every 1meter core	Rs.5000/- Every 1meter core
9.	Natural Remanent Magnetization (NRM)	AGICO JR-6 Spinner Magnetometer	Rs.50/-		Rs.75/-	Rs.150/-
10.	Anhysteretic Remanent Magnetization (ARM)	AGICO JR-6, ASC AF Demagnetiser	Rs.75/-		Rs.100/-	Rs.200/-
11.	Isothermal Remanent Magnetization (IRM)	AGICO JR-6 & ASC Impulse Magnetiser	3 step*	Rs.225/-	Rs.300/-	Rs.600/-
			8 step*	Rs.525/-	Rs.700/-	Rs.1400/-
			13 step*	Rs.975/-	Rs.1300/-	Rs.2600/-
12.	Alternating Field Demagnetisation (AFD)	AGICO JR-6, ASC AF Demagnetiser	Rs.1800/- (All AF Steps) (0 to 200 mT)	Rs.2500/- (All AF Steps) (0 to 200 mT)	Rs.5000/-(All AF Steps) (0 to 200 mT)	

13.	Thermal Demagnetisation (TD)	AGICO JR-6, ASC AF Demagnetiser	Rs.2000/- (All TD Steps) 40^0c to 800^0c	Rs.3000/- (All TD Steps) 40^0c to 800^0c	Rs.5000/- (All TD Steps) 40^0c to 800^0c
14.	Rock drill for palaeomag sample preparation	Laboratory Lapidary core drill LB-01 (ASC scientific)	Rs.500/- Each block	Rs.1000/- Each block	Rs.2000/-Each block
15.	Rock cutting for palaeomag specimen	Dual Blade Rock Saw S1-220 (ASC Scientific)	Rs.100/- for each core	Rs.200/- for each core	Rs.400/- for each core
16.	Magnetic vial sample preparation	10 cc sample bottles, cling films, agate, tissuepaper, isopropyl alcohol etc	Rs.40/-	Rs.50/-	Rs.100/-

* steps IRM involves 1000 mT

** 8 steps IRM involves 20 mT, 1000mT, -20mT, -30mT, -60mT, -100 mT, -300 mT

***13 steps IRM involves (20, 100, 300, 500, 800, 1000) mT, -20 mT, -30 mT, -40 mT, -60 mT, -100 mT, -300 mT

19/10/2023

(संदीप कुमार शिवहरे /Sandeep Kumar Shivhare)
रजिस्ट्रार /Registrar

प्रतिलिपि/Copy to:

1. संबंधित व्यक्ति (यों)/Person (s) concerned
2. निजी सचिव/रजिस्ट्रार कार्यालय/अनुसंधान योजना एवं समन्वय प्रकोष्ठ/PS/Registrar's Office/ RDCC
3. परियोजना समन्वयक/Project Coordinator
4. लेखाधिकारी/अनु.अधि.(स्थापना)/(भंडार एवं क्रय)/अनु.अधि. (निर्माण एवं भवन)/हिंदी अनुवादक/संयोजक ज्ञान संसाधन केन्द्र/ Accounts Officer/S.O.(E)/S.O. (S&P)/S.O. (W&B)/ Hindi Translator/ Convener, KRC
5. कार्यालय प्रति/Office Copy
6. अतिरिक्त प्रति/Spare Copy
7. everyone@bsip.res.in / Convener, Web-site Committee