

ASC Scientific Thermal Demagnetizer



Make: ASC Scientific, USA

Model: TD48, High-capacity dual-chamber Thermal Specimen Demagnetizer

- 96 Sample Capacity, (48 heating, 48 cooling)
- 3-Layer Seamless Magnetic Shield
- Separate Heating and Cooling Chambers
- 3 Zone Oven for Uniform Temperature
- 25 to 799°C Range

Description:

The Model TD48 Thermal Demagnetizer features a large internal diameter oven and three row sample boat for heating up to 48 one-inch diameter or one-inch cubic geologic samples in a single batch. The oven and adjacent fan-assisted cooling zone are housed in a three layer seamless magnetic shield which permits cooling of one batch while a second batch is heating. The cooling chamber has two additional shields which limit the maximum internal field to less than 10 nT with the instrument oriented perpendicular to the earth's field. The oven has three independently controlled zones- a large sample zone and two small trimmer end zones - which minimize temperature gradients across the sample zone while keeping overall oven length to a minimum. The system was designed for long service life by incorporating features into the oven and sample boat that protect the internal oven wall from damage.

SPECIFICATIONS

Absolute Temp. Accuracy:	10°C
Temp. Repeatability:	1°C
Max. Temp. Gradient:	10°C Total Over 16" Sample Region of Oven Chamber with Full Sample Load. 3°C Attainable with Partial Sample Load
DC Field in Heating Chamber:	Less than 25 nT (Gammas), When System is Oriented in East-West Direction
DC Field in Cooling Chamber:	Less Than 10 nT (Gammas), 2-5 nT Typical
Heating Time:	48 Specimens From 25°C to 600°C in 45 Minutes
Cooling Time:	48 Specimens From 600°C to 40°C in 25 Minutes
Power Requirements:	115 VAC, 30 AMPS; 230V operation with supplied step-down transformer
Size:	Oven Unit - 72" (183 cm) L x 16" (40.5 cm) W x 13" (33 cm) H Control Unit - 17" (43 cm) W x 15" (38 cm) D x 7" (18 cm) H

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 तात्त्विक 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.	Anhyseretic 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 ⁰ c to 800 ⁰ c	Rs.3000/- (All TD Steps) 40 ⁰ c to 800 ⁰ c	Rs.5000/- (All TD Steps) 40 ⁰ c to 800 ⁰ c
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

(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/
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