Name of Machine

Magnetic Separation of minerals facility

Make S.G. Frantz Co., New Jersey

Model

LB-1, Isodynamic Magnetic Separator



Specification

LB-1 Magnetic Barrier Laboratory Separators exploit either paramagnetic or diamagnetic properties to separate dry materials according to magnetic susceptibility. They deliver more than 3.5 times the magnetic separating force of the Isodynamic[®] Separator, provide improved particle feed and transport systems, and allow the separation to be observed.

Working principle:

Material is fed into one end of the magnetic field of an electromagnet having two long pole pieces (with a long narrow air gap between them). Material travels the entire length of the pole pieces, with the more strongly paramagnetic particles being urged toward the narrow side of the gap. The grains are intercepted by a dividing edge which directs the two fractions into separate containers.

Application

Mineral separation from assemblages of minerals based on their magnetic susceptibility.

User Instruction

The samples must be collected as per the instructions and method given in Morthekai and Ali, 2014. "Luminescence Dating Using Quartz-for End Users, Gond. Geol. Mag., V. 29".

| | Contact Person |
|-----------|---|
| In-Charge | Dr.Anupam Sharma (0522-2742974); Email anupam110367@gmial.com; anupam.sharma@bsip.res.in |
| Staff: | Dr. S. N. Ali (0522-2742914), Email: snawazali@gmail.com; |
| | Dr. P. Morthekai (0522-2742914), Email: morthekai@gmail.com |

charges

| Instrument/ Analysis | Govt. Organization | | Private sector/ Industry | Remarks (if any) |
|------------------------------|--------------------------------------|---------|-----------------------------|-----------------------------------|
| | (University/ Research Institutes) | Student | | |
| Magnetic mineral separation) | 300.00 | 200.00 | 500.00 | The grain size should be < 500 μm |

Guideline

- 1. The analytical data/spectra provided cannot be used as certificates in legal disputes.
- 2. Service charges (GST) will be payable in advance (Draft/RTGS/NEFT) in favour of "The Director, BSIP, Lucknow". Payable at Lucknow
- 3. Separate samples should be sent for different analysis. Samples will not be analysed until payment is received.
- 4. In case of prepared samples, the user must specify the procedure that how the sample was prepared (complete methodology).
- 5. In all correspondence related to analysis, our reference number must be mentioned.
- 6. Individual Scientists and Research fellows should send their application and samples through their project head. Discount in analysis charges for research fellows of universities/institutes will be decided by the Director in consultation with respective lab.
- 7. Interpretation of data/spectra will NOT be done.
- 8. It is mandatory for user to acknowledge the facility in their research work and communicate the same to the respective laboratory and the Director, BSIP, Lucknow for onward communication to DST, New Delhi.
- 9. For Lab visit, it is mandatory to take prior appointment from Director, BSIP before your visit. The application should be send through department/Senior official of institution/Company. No deviation will be allowed for the timings.

Job No as LumDL CF Date of submission:

SAMPLE INFORMATION FORM BIRBAL SAHNI INSTITUTE OF PALAEOSCIENCES, LUCKNOW

53, University Road, Lucknow, Ph. 0522-2740008, 2740399 (Luminescence Dating Laboratory (LumDL); Central Facility)

Geochemistry Lab

(Information to be filled in by the user)

| Name: |
|--|
| Address: |
| |
| Email and Mobile No.: |
| Category (Student/Govt. organization/private): |
| Number of samples: |
| Nature of samples (with details): |
| Scientific Objective of this study: |
| |
| Additional information, if any: |
| |

^{*}Note that the sample amount should not exceed 50 gm and the maximum sample grain size must be less than 500 μm

Job No as LumDL CF Date of submission:

REQUISION FORM

BIRBAL SAHNI INSTITUTE OF PALAEOSCIENCES, LUCKNOW

53, University Road, Lucknow, Ph. 0522-2740008, 2740399 (Luminescence Dating Laboratory (LumDL); Central Facility)

Geochemistry Lab

(Information to be filled in by the user)

| Name: |
|---|
| Address: |
| Email and Mobile No.: |
| Category (Student/Govt. organization/private): |
| Number of samples: |
| Nature of samples (with details): |
| (For office use only) |
| Lab Reference No.: |
| R.P.C.C./ Registrar : Kindly raise the bill for the above |
| Total Charges: Taxes: Grand Total: |