

**Requisition form**

Serial No. \_\_\_\_\_

Date: \_\_\_\_\_

**ELECTRON PROBE MICRO ANALYZER (EPMA) LABORATORY  
CENTRAL RESEARCH FACILITY****INDIAN INSTITUTE OF TECHNOLOGY (ISM), DHANBAD – 826004**

[Please read the information given overleaf before filling up this form and put a tick (✓) in appropriate box]

I wish to get \_\_\_\_ in words (\_\_\_\_) number of samples be examined/analysed. The nature of samples is Metallic (\_\_\_\_), \*Ceramic (\_\_\_\_), \*Semiconductor (\_\_\_\_), \*ICs (\_\_\_\_), \*Composites (\_\_\_\_), \*Geological samples (\_\_\_\_) or \*others (\_\_\_\_).

[All the samples must be in solid form and well-polished. Samples in powder form are not analysed by EPMA].

(If \_\_\_\_\_ others \_\_\_\_\_ please \_\_\_\_\_ elaborate: \_\_\_\_\_)

I wish to study the sample for (1) Imaging: BSE Z [\_\_\_\_], BSE T [\_\_\_\_], ABS e<sup>-</sup> [\_\_\_\_], SE [\_\_\_\_], CL [\_\_\_\_]

(2) Quantitative analysis for Silicates [\_\_\_\_], Sulfides [\_\_\_\_], Monazite [\_\_\_\_] (3) Accurate Quantification of Traces such as REE, PGE etc. [\_\_\_\_], (3) Line Profile [\_\_\_\_], (4) X-ray Map [\_\_\_\_], (5) Quantitative Mapping [\_\_\_\_], (6) Monazite dating [\_\_\_\_] (7) Age Map [\_\_\_\_].

[\*: Carbon Coating necessary]

I need /carbon coating (Yes/No) \_\_\_\_\_ (For non-conducting samples)

Please allot me slots of .....hour/s (each slot is 1 hour), the estimated charge for the work is ₹ \_\_\_\_\_

User's Name (block letter): \_\_\_\_\_ Name of Supervisor \_\_\_\_\_

Dept./Centre \_\_\_\_\_ Lab Phone No. \_\_\_\_\_ Cell No: \_\_\_\_\_

Signature of HOD/HOC/Guide/PI/Prof.-in-Charge \_\_\_\_\_

Signature of the user \_\_\_\_\_

**Details of analysis Charges:**

The estimated charge for the work ₹ ..... (In words ... ..) has been deposited through †DD (Number .....) / †Cash payment in the IIT (ISM) Dhanbad Cash counter (Receipt No. ....) on ..... (date) /

**OR**

To be debited from (**For internal users only: PDA/PDF/Project**): ... ..

† Please provide the original DD / CC of cash receipt along with this form.

Signature of the User /Faculty /Supervisor /PI \_\_\_\_\_

Please allot time and complete the work.

Signature of the Laboratory In-Charge \_\_\_\_\_

The above work has been done satisfactorily on \_\_\_\_\_ (Date) within \_\_\_\_\_ number/s of slot and generated data has been delivered to me.

Signature of the Operator \_\_\_\_\_

Signature of the user \_\_\_\_\_

### **INFORMATION FOR USERS**

The charges for the Imaging (BSE Z , BSE T , ABS e<sup>-</sup> , SE , CL), Quantitative analysis (Silicates, Sulfides, PGE and REE), Line Profile , X-ray Mapping, Quantitative Mapping, Monazite dating, and Age mapping are as follows (per hour long slot) in ₹:

Users	Rs (₹)Per Hour
For users of IIT (ISM) (Students/Research Scholars/ Faculty)	500/-
IIT (ISM) Consultancy	1000/-
For Students/Research Scholars outside IIT (ISM)	1000/-
Educational and Govt. R&D Labs (Faculty/Scientists)	1500/-
For Industry*	3000/-

[No TAX is required for users of IIT (ISM)]

\*The charges are excluding GST.

#User must come with prepared samples in the form of Thin polished sections (Size: 4.5Cm×3.5Cm) or cylindrical shaped polished slabs (Size: 2.5Cm Dia/ maximum 2cm thick or less). Samples in powder form are not analysed by EPMA.

#### **Booking Rules for EPMA**

- 1) The EPMA instrument is available for booking every week as follows: Total 10 halves / sessions in 5 working days (Monday - Friday). Each session is for three hours or 3 slots (including sample mounting, sample insertion, venting and data collection time). At any given point of time, two thin polished sections slides or four polished slabs can be inserted to the instrument but only one of them can be analysed.
- 2) Magnetic samples may be declared properly.
- 3) Samples require C coating or not must be mentioned in the booking form clearly.
- 4) Moisture within the sample is not allowed for study. Hydrated samples must be dried properly before run.
- 5) Deadline for submission of slot booking forms is Thursday (up to 3 PM) of the previous week.
- 6) Allotment of slot will be notified at 4 PM on the next day (i.e. Friday).
- 7) One can get a maximum of 2 consecutive slots at a time (approximately two hours). Users who could not obtain a booking in the preceding fortnight will be given preference.
- 8) All payment must be made prior to booking of the slot and true copy of the payment Slip (for deposit in IIT (ISM) cash counter in the head of **CRF-EPMA**) or original DD (must be drawn in favour of **Registrar, IIT (ISM)**) must be provided with booking form.
- 9) All forms must be forwarded through the concerned HOD, HOC, PI, Guide or Prof.-in-Charge etc. and to be submitted in the EPMA Laboratory.
- 10) In case of power shut down or unforeseen disturbances, any unutilized slot will be subsequently compensated for in the next round of booking.
- 11) All users should inform composition and sample details to the operator and leave a copy of the photographs/results in the laboratory for internal records (log book).
- 12) Generated data will be provided to the user only through the new unused blank CD. No request will be entertain for providing generated data by e-mail, pen drive, external hard disk or any other means. Thus user may bring a new CD for collection of their data.
- 13) All users are sincerely requested to inform the laboratory if any of the results obtained from EPMA receive special recognition (publication, award, journal-cover-page, special citation etc.) and leave a copy of their reprint, photograph or award copy with the EPMA lab for internal documentation.

