INDIAN INSTITUTE OF TECHNOLOGY BOMBAY

DEPARTMENT OF EARTH SCIENCES

Registration Form for Laser Raman Confocal Imaging Spectroscope (LRS)

1. Name of the User : _____

2. Roll No./Designation : _____

3. Email and Contact No. : _____

4. Supervisor : _____

5. Name of Institution/Department : _____

6. Laser Raman analysis required for

i) Degree Course Registered:

(Ph.D./M.Tech/B.Tech/D.D./M.Sc/BSMS) : _____

ii) Sponsored project (Project title and No.) : _____

iii) Consultancy (With job order no.) : _____

7. Number of samples : _____

8. Type of Analysis : _____

9. Brief description of the sample : _____

10. Bill to be drawn in the name of : _____

11. Sample Details

Sr. No.	Sample code	Nature of Sample	Matrix

Use another sheet if required.

*It is mandatory for user to acknowledge IOE funded facility at Dept. of earth sciences, IIT Bombay, in their publications and thesis and communicate the same to the laboratory.

*charges are on hourly basis.

*One slot/ appointment is of 2 hours.

*All charges are without interpretation

User's Signature **Guide's Signature** **Signature of lab In-charge**

RULES FOR THE USE OF LASER RAMAN SPECTROSCOPY LAB

SAFETY NOTICES:

1. High-power laser irradiation may lead to severe eye damage.
2. Improper operations can cause damage to the instrument.

LAB INSTRUCTIONS:

1. Nobody is allowed to enter the lab without notifying the lab personnel.
2. Analysis/Experiment should only be performed during working hours.
3. All activities have to be supervised by trained members or technical staff.
4. No outsiders / Unauthorized personnel are allowed into the labs unless approved or/on official matters.
5. Food and drinks should not be consumed or stored in the laboratory.

RULES FOR USING THE LASER RAMAN INSTRUMENT:

1. Objectives are fragile and must not be forcefully inserted into samples.
2. All 5 (4x, 10x, 20x, 50x, & 100x) Objective lenses are securely mounted on the nosepiece and must not be removed without permission.
3. Do not touch lenses; handle ONLY the nosepiece.

WHILE LOADING SOLID SAMPLE:

1. When placed on the motorized sample stage, the samples height should be smaller than 2cm
2. The samples upper surface should be relatively smooth and flat to minimize the chance of ramming the objective into sample.
3. It is highly recommended to load the sample onto a piece of microscope slide with a clean Raman background that fits into the sample stage track perfectly horizontally.
4. Given that different samples have different Raman responses, it is recommended to optimize the acquisition parameters with an overall consideration of signal intensity, photo damage and work efficiency,
5. Only modify parameters with a thorough understanding of their meanings in presence of In-charge/ instrument operator.
6. When you leave the lab, you are responsible for safely disposing off your samples, chemicals, solvents, cultures, etc.
7. Lab equipment, items or standards should be transported out with notification and approval from the lab in-charge.
8. Violation of these guidelines mat result in access suspension.

Name and Signature of the Student **Date**

DEPARTMENT OF EARTH SCIENCES

Charge-Slip for Analytical Facility

Instrument: Laser Raman Confocal Imaging Spectroscope (LRS) Date : _____

User Name: _____

Contact Number: _____

Email: _____

Department: _____

If charges are deducted from the Sponsored Project, then please specify the following:

(1) **Project Code**: _____ (2) **PI:** _____

If charges are deducted from the Department Fund, then please specify the following:

(1) **Expenditure Head/ code**: _____

Kindly debit the amount from the sponsored project/ Department Fund specified above and credit to the income account: **_____**

_____ _____ _____

(Signature of the User) (Signature of PI) (Signature of the HOD)

(For Sponsored Project) (For Department Fund)

To: Dean (R&D) / sDY. Registrar(F&A)

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