



Indian Institute of Technology Jodhpur

N.H. 62, Nagaur Road, Karwar, Jodhpur - 342030, Rajasthan (India)

☎ 0291-280 1552 | ✉ office_materials@iitj.ac.in

Website: Department: <https://www.iitj.ac.in/materials-engineering> | IITJ: www.iitj.ac.in

Sample Format

INDIAN INSTITUTE OF TECHNOLOGY JODHPUR

Request For Technical Information and Pro Forma Quotations

For Procurement of Micro PL Microscope and Accessories (to be coupled to the TRPL System)

1. Introduction

The Indian Institute of Technology Jodhpur (IIT Jodhpur) intends to procure **Micro PL Microscope and Accessories (to be coupled to the TRPL System)** for academic and research purposes.

Before initiating the formal procurement process, the Institute invites **Technical Information And Indicative Pro Forma Quotations** from eligible Original Equipment Manufacturers (OEMs) or their authorized representatives.

2. Purpose

The objectives are to:

- Obtain technical information from prospective OEMs/authorized representatives.
- Obtain indicative Pro forma quotations for estimating the procurement cost.

3. Disclaimer

This document is issued **only for obtaining technical information and indicative Pro Forma quotations**.

Submission of information under this proposal:

- shall **not** be treated as a financial bid;
- shall **not** constitute any commitment on the part of IIT Jodhpur to procure the equipment;
- shall **not** confer any right upon the participating firm for award of any future contract;
- shall **not** automatically qualify the responding firm for participation in any future tender.

The Institute reserves the right to modify the technical specifications, estimated cost, procurement methodology, or procurement timeline based on its requirements.



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4. Equipment Details

- Name of Equipment: Micro PL Microscope and Accessories (to be coupled to the TRPL System)
- Quantity: 1
- Broad Functional Requirements (The essential functions or capabilities that the equipment should have, without mentioning a specific make, model, or brand): The Micro PL Microscope is required to upgrade the existing Photoluminescence Spectrometer (Model: FLS1000, Make: Edinburgh Instruments) system to perform the Micro steady state Photoluminescence (PL) and Micro Time-Related Single Photon Counting (TCSPC) measurements.

(The above requirements are indicative and may be revised after evaluation of the responses.)

5. Eligibility Criteria

Interested firms should:

- Be an Original Equipment Manufacturer (OEM) or an authorized distributor/dealer.
- Have experience in supplying similar equipment.
- Have adequate installation and after-sales service support in India.

6. Information/Documents to be Submitted

The interested firms shall submit the following (*Annexure-I*):

1. Company Profile.
2. Details of the OEM.
3. Product Brochure/Catalogue.
4. Detailed Technical Specifications.
5. Compliance with the Broad Functional Requirements.
6. List of previous users/clients with installation reports
7. Details of Warranty.
8. Details of After-Sales Service Support.
9. Authorization Letter from OEM (where applicable).
10. Any additional technical information relevant to the offered equipment.

7. Pro forma Quotation

- Interested firms are requested to submit a Pro forma Quotation (*Annexure-II*) along with their Request For Technical Information and Pro Forma Quotations response. Indicative **Pro Forma** quotation in Indian Rupees (INR), including the cost of the equipment, essential accessories, taxes, duties, freight, insurance, installation, commissioning, training, and any other associated charges. Wherever applicable, the Annual Maintenance Contract (AMC) and/or Comprehensive Maintenance Contract (CMC) charges and spare parts shall be quoted separately as additional charges.



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- Expected delivery schedule and other relevant technical and commercial information.

Important Note:

- The **Pro Forma** quotation is required only for cost estimation and budget planning purposes.
- The prices quoted shall be indicative/non-binding.
- The Pro Forma quotation shall not be treated as a financial bid.
- Submission of a **Pro Forma** quotation shall not confer any right or preference in the subsequent procurement process.

8. Presentation/Demonstration

The Institute may invite for a technical presentation or product demonstration. The date and venue shall be communicated separately.

9. Submission :

Interested firms may submit their Proforma Quotations on or before the due date in sealed cover or through email (as applicable).

The envelope/email should be superscribed as:

"Request For Technical Information and Pro forma Quotations for Procurement of Micro PL Microscope and Accessories (to be coupled to the TRPL System)"

8. Important Dates

Activity	Date
Publication	12-08-2026
Last Date for Submission	09-09-2026
Technical Presentation (if required)	
Clarification Meeting (if required)	

10. General Terms & Conditions

1. This **Request For Technical Information and Pro forma Quotations** is issued only for obtaining technical information and **Pro Forma** estimates.
2. The Institute reserves the right to accept or reject any or all responses without assigning any reason.
3. Submission of an **Request For Technical Information and Pro forma Quotations** does not create any contractual obligation.
4. The Institute may seek additional information, technical clarifications, demonstrations, or presentations from any participant.
5. The Institute may modify the technical requirements based on the responses received.



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6. The final technical specifications may be prepared by the User Committee after evaluating all **Request For Technical Information and Pro forma Quotations** responses.
7. The subsequent procurement, if any, shall be carried out through an appropriate procurement method in accordance with the GFR 2017 and applicable procurement rules.
8. Participation in this **Request For Technical Information and Pro forma Quotations** does not automatically entitle any firm to participate in or receive any preference during the subsequent tender process.

11. Contact Details

Name: Dr. Pranay Ranjan

Designation: Assistant Professor

Department: Materials Engineering

Email: pranay.ranjan@iitj.ac.in



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Annexure-I

Request For Technical Information and Pro forma Quotations Response Format

1. Name of the Firm:
2. Registered Address:
3. Name of OEM (if applicable):
4. Contact Person:
5. Email:
6. Phone:
7. Product Name and Model:
8. Brief Technical Description:
9. Compliance with Broad Functional Requirements:
10. List of previous users/clients with installation reports:
11. After-Sales Service Details:
12. Any Additional Features:
13. Remarks (if any).



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Annexure-II

Format for Pro forma Quotation

Description of equipment: The Micro PL Microscope is required to upgrade the existing Photoluminescence Spectrometer (Model: FLS1000, Make: Edinburgh Instruments) system to perform the Micro steady state Photoluminescence (PL) and Micro Time-Correlated Single Photon Counting (TCSPC) measurements.

Component	Specification
Microscope Type	- Upright microscope from a reputed brand such as Nikon, Leica, Olympus, Carl Zeiss, Keyence, Bruker, DXG, etc. - Infinity corrected optical system - Microscope frame for transmitted and reflected light - Should be suitable to hold the specimen of height up to 30 mm (± 5 mm) or better without spacer
Coupling	- The microscope should be optically coupled with the existing FLS1000 Photoluminescence Spectrometer (Edinburgh Instruments) system using appropriate arrangement such as Widefield optical fibres - Optical Fibre length should be 1.5 m (± 0.5 m) or better
Excitation	300 W or more ozone free (off-axis) xenon lamp (available from existing FLS1000 system) - Pulsed LED (280 nm $\pm$ 10 nm)/ Pulsed diode laser/CW Laser (405 nm $\pm$ 5 nm) (available from existing FLS1000 system) 510 nm (± 5 nm) Picosecond Pulsed Diode Laser pulsed width < 70 ps or better for TCSPC measurement 532 nm (± 5 nm) CW laser with 50-300 mW or better for output power with 3% (± 0.3%) stability for steady state PL measurement - Should be extended with non-standard UV and NIR objectives
Emission and Detector	- Emission in standard visible region (300 nm to 870 nm) or better as per the detector range of the FLS1000 system - Micro PL steady state and TCSPC measurements using the detectors of the FLS1000 system



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Illumination	• 100-watt (± 10 watt) or better standard halogen illumination lamps for both transmitted and reflected light sources • Light source with hub: Quantity 02 • Bulb: Quantity 04
Observation Modes	• Bright field and polarization in reflected light • Bright/Dark field and polarization in transmitted light illumination • Automated maps of fluorescence decays • fluorescence microscopy images • fluorescence lifetime image mapping
Optical Stage	• Software controlled XYZ stage for mapping 120 mm x 80 mm or higher area • XY resolution 0.01 μm (step-size) or better • Z resolution 0.002 μm or better • Controller with digital joystick
Filter and Mirrors	Should have appropriate filters, filter holders, mirrors and mirror cubes as per the mentioned excitation sources and emission range.
Camera	• Digital camera to perform Fluorescence Microscopy imaging • Software controlled • High resolution colour CMOS camera with minimum 5.0 MPS or better resolution, live speed at least 25 fps or better, pixel size 2.4μm x 2.4μm or better, sensor size- 1/1.8 inch or better, with suitable c-mount
Polarizer	• Excitation and Emission Polarizers for both FLS1000 and Microscope. • 360° (-10°) rotatable analyser, polarizer • Spectral range should be 250-900 nm or better
Condenser	Swing out polarizing condenser lens with built in polarizer



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Objective Lenses	Plan fluor/semi-apochromat objectives for bright field and fluorescence: • 5X, WD 15.00mm or better • 10X, WD 9.00 mm or better • 20X, WD 3.0mm or better • 50X, WD 1.00mm or better • 100X, WD 1.00 mm or better The objective category, manufacturer name and N.A./WD etc. should be engraved on the objective mandatorily for ensuring quality.
Nose Piece	Sextuple nosepiece compatible for bright field
Eyepiece Tube	Trinocular eyepiece tube with three-way standard light path selector or better: F.O.V. 20 mm or better
Eyepiece Lens	One pc. 10X eyepiece with perpendicular cross hair and micrometer scale and one normal 10X eyepiece (F.O.V 20 mm or better respectively)
Low-temperature stage	• A replaceable vacuum stage with optical window should be provided to perform low-temperature PL measurements • Liquid Nitrogen Cooling System for automatic cooling of the sample below ambient temperature to -196 °C ($\pm 5^\circ\text{C}$), and heating from ambient to +350 °C ($\pm 5^\circ\text{C}$) or better, XY manipulation and 2 x electrical connector posts or better • Standard Controller including Mains Lead, Software controlled
Compatibility & Upgradation	Microscope, objectives lenses, camera, imaging software must be from single manufacturer for best synchronization
Software	• The Software should be compatible for smooth operation of FLS1000 and the Microscope system • Image capturing and movie acquisition, image analysis and annotation, layer management, cross hair, image filter, digital grid, line profile display, 2D-geometrical measurement
Computer	A high-end complete PC system should be included for system operation with minimum specs or better: i7 processor of latest generation, RAM 32 GB, SSD 1TB, USB3.0 port, PCI slot, 23" monitor, UPS, Windows11, MS office, CD/DVD writer.



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UPS	An appropriate 3 kVA or better online UPS system, providing 30 minutes or better backup power.
Training	Training cum workshop should be provided for the system operation and maintenance at site immediately after installation with the standard samples to be provided by the vendor
Shifting	The vendor should arrange the shifting of the equipment after installation, if required.
Furniture/site preparation	The vendor should provide the required furniture/site preparation for successful installation of the equipment.
Accessories	Sample holder to measure the liquid sample and powder sample on the microscope

Terms and Conditions:

1. At least 3 years Comprehensive warranty
2. Software compatibility is a must with the existing system.
3. Interfacing with current equipment should be done by the vendor and any issues related to software or hardware must be resolved by the vendor who is responsible for system integration.
4. Vendors should have supplied at least 5 such equipment to IITs/CFTIs in the last five years and details should be furnished.
5. Photographs and catalogues related to equipment and accessories should be enclosed in the offer. Dimensions of equipment, weight and space requirements should be submitted in technical offer.
6. Vendors are responsible for yearly maintenance and they should promise it for at least 3-5 years.

Warranty Period: Comprehensive Warranty 3 years

AMC/CMC Charges (after warranty): _____

Delivery Period: 2-4 months

Authorized Signatory

Name: _____

Designation: _____

Company Seal & Signature



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