



Indian Institute of Technology Jodhpur

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

☎ 0291-2801552 | ✉ office_materials@iitj.ac.in

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

INDIAN INSTITUTE OF TECHNOLOGY JODHPUR

Request For Technical Information and Pro Forma Quotations

For Procurement of FE-SEM with backscattering, EDAX and EBSD

1. Introduction

The Indian Institute of Technology Jodhpur (IIT Jodhpur) intends to procure **FE-SEM with backscattering, EDAX and EBSD** 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.

4. Equipment Details

- Name of Equipment: FE-SEM with backscattering, EDAX and EBSD
- Quantity: 01
- Broad Functional Requirements (The essential functions or capabilities that the equipment should have, without mentioning a specific make, model, or brand):



Indian Institute of Technology Jodhpur

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

☎ 0291-2801552 | ✉ office_materials@iitj.ac.in

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

The broad functional requirements are indicative and may be revised by the Institute after evaluation of the technical information received from prospective suppliers.

Sl. No.	Parameter	Broad Functional Requirement
1	Electron Source	Thermal Schottky Field Emitter or better
2	Resolution @ 15 kV	1.5 nm or better
3	Resolution @ 1 kV	1 nm or better
4	Magnification	10x to x 10,00,000x or better
5	Accelerating Voltage	Lower limit: 20V or less Higher limit: 30KV or higher
6	Probe Current	1 nA or higher
7	Electron Optics	In Lens detector, Ability to capture images of both magnetic and non-magnetic samples Stage Biasing/Beam Deceleration for high resolution image at low KV, Double Condenser Lense
8	Detectors	In Lens SE detector and back scattered detector EDS Detector: 5000 to 100000 cps at low KV imaging with detection range Be to U or better, 60 mm ² or Better, Energy resolution 127 eV or better at Mn Ka, should be upgradable to WDS EBSD Detector: 2000 fps or better, C-MOS based camera, Dedicated Software for EBSD Analysis, Ability to perform ECCI and ECCI Pattern Indexing Software
9	Specimen Chamber	5 axis motorized stage with following stage movements X = 100 mm or more Y = 100 mm mor more Z= 50 mm or more Tilt= -10° to +90° or better R= 360° continuous
10	PC/Workstation	The SEM will be controlled by a high-grade PC having an Intel Core i5 processor or better. The operating system should be Windows 11 or higher. Monitor size 27-inch. A separate monitor for EDS and EBSD Analysis
11	Accessories	Chiller Compressor Sputter coater Electropolisher Critical Point Dryer (CPD)
p12	UPS	Suitable for providing at least 1 hour back up
13	Warranty/AMC	3 Year comprehensive warranty from the date of successful installation and commissioning including EDS and EBSD followed by 3 years AMC A separate 5 years warranty for the electron gun from the date of successful installation and commissioning



Indian Institute of Technology Jodhpur

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

☎ 0291-2801552 | ✉ office_materials@iitj.ac.in

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

14	Installation, Commissioning & Training	The installation, commissioning and demonstration of complete system are to be carried out by the supplier free of cost. After successful installation and commissioning, on-site operational training for the deputed personnel is to be provided for required days at no additional cost.
15	Trained Operator	Skilled and dedicated Manpower for initial 3 years
16	Service Facility	The supplier must have sufficient nos. of local service engineers to prompt and top-notch service.
17	Spare Availability	10 years from the date of successful installation and commissioning
18	Delivery	DDP/FOR

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.



Indian Institute of Technology Jodhpur

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

☎ 0291-2801552 | ✉ office_materials@iitj.ac.in

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

- 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 FE-SEM with backscattering, EDAX and EBSD"

8. Important Dates

Activity	Date
Publication	04 Aug. 2026
Last Date for Submission	12 Aug. 2026
Technical Presentation (if required)	To be informed
Clarification Meeting (if required)	To be informed

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.



Indian Institute of Technology Jodhpur

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

☎ 0291-2801552 | ✉ office_materials@iitj.ac.in

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

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. Ravi Prakash Srivastava

Designation: Assistant Professor

Department: Materials Engineering

Email: ravip@iitj.ac.in



Indian Institute of Technology Jodhpur

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

☎ 0291-2801552 | ✉ office_materials@iitj.ac.in

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

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).



Indian Institute of Technology Jodhpur

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

☎ 0291-2801552 | ✉ office_materials@iitj.ac.in

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

Annexure-II

Format for Pro forma Quotation

Sl. No.	Description	Amount (INR)
1	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.	

Warranty Period: _____

AMC/CMC Charges (after warranty): _____

Delivery Period: _____

Authorized Signatory

Name: _____

Designation: _____

Company Seal & Signature