



भारतीय विज्ञान शिक्षा एवं अनुसंधान संस्थान मोहाली

मानव संसाधन विकास मंत्रालय, भारत सरकार द्वारा स्थापित

सैक्टर-81, नॉलेज सिटी, प० ओ० मनोली, एस० ए० एस० नगर, मोहाली, पंजाब 140306

INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH MOHALI

(Established by Ministry of Human Resource Development, Govt. of India)

Sector-81, Knowledge city, PO-Manauli, SAS Nagar Mohali-140306, Punjab

PAN No. - AAAAII781K GSTIN No:- 03AAAAII781K2ZS

• Phone : +91-172-2240086 & 2240121 • Fax : +91-172-2240124, 2240266 • <http://www.iisermohali.ac.in> • Email: stores@iisermohali.ac.in

CPPP/Institute Website

IISERM (1225)19/20Pur

Dated: 04th July 2019

NOTICE INVITING E-TENDER

Online tenders are invited on behalf of Director, IISER Mohali in **TWO BID SYSTEM** for the **Supply and Installation of Precision Ferroelectric Test System** as per technical specification and details given below and BOQ list from the original manufacturer/supplier at CPPP i. e. <https://eprocure.gov.in/eprocure/app>. Tender documents may please be downloaded from the E-procurement portal website <https://eprocure.gov.in/eprocure/app> & Institute website www.iisermohali.ac.in.

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(Mukesh Kumar)
Assistant Registrar (P&S)



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E-TENDER NOTICE

Tender Ref.- IISERM(1225)19/20Pur	Dated :- 04 th July 2019
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Critical Date Sections

Sr.	Description	Date	Time
1.	Tender Publishing Date and time	04 th July 2019	6:00pm
2.	Tender Document download start Date & Time	04 th July 2019	6:00pm
3.	Bid Submission start Date & Time	04 th July 2019	6:00pm
4.	Bid Submission End date and Time	24 th July 2019	Upto 11:00am
5.	Tender opening Date and Time	25 th July 2019	At 11:30am

Online tenders are invited on behalf of Director, IISER Mohali in **TWO BID SYSTEM** {Technical and commercial separately} for the following item(s) from the original manufacturer/supplier at CPPP i.e. <https://eprocure.gov.in/eprocure/app>. Tender documents may please be downloaded from the E-procurement portal website <https://eprocure.gov.in/eprocure/app> & Institute website www.iisermohali.ac.in. Tender fee in shape of DD/Banker Cheque of Rs 590/- (Non-refundable) and EMD of Rs 30,000/- should be submitted by DD /Banker Cheque/FDR/ Bank Guarantee in favour of the Registrar, IISER Mohali payable at Mohali. However, scanned copy of the both tender fee and EMD should be upload on website along with technical bid part. The hard copy of the same in original to be send to the address mentioned below duly superscribing the supply/work name and reference/ tender ID on the envelope and same must reach before opening the bid and if not received within due date the bid will be rejected summerly.

The Original EMD and Tender Fee should be sent to:

Assistant Registrar (P&S)
Indian Institute of Science Education and Research Mohali
Sector-81, Knowledge City, SAS Nagar, Mohali, Punjab,
India, Pin: 140306

Non-receipt of original EMD and Tender Fee will lead to rejection of tender.

Item Details: -

Sr.	Description	Qty.
1.	<p data-bbox="284 226 1189 259"><u>Supply and Installation of Precision Ferroelectric Test System</u></p> <p data-bbox="284 277 1286 311">It must be suitable for measuring ferroelectric properties of organic materials.</p> <p data-bbox="284 351 657 385">MEASUREMENT TASKS</p> <p data-bbox="284 425 1214 459">The instrument should be able to carry out the following measurements.</p> <ol data-bbox="316 499 1358 1451" style="list-style-type: none">1) <i>Hysteresis</i> – A standard ferroelectric characterization measurement. This Task measures sample polarization (5C/cm²) response to a Task-applied voltage profile. The profile is of user-specified maximum voltage and period (ms). (Period = 1000/frequency.) Profiles are normally standard bipolar (triangular) but may be monopolar, sinusoidal or user-specified.2) <i>Small Signal Capacitance</i> – This measurement captures the samples capacitance as a function of voltage. It measures the capacitance at each voltage step using a very small stimulus signal to eliminate polarization switching components of the sample response.3) <i>PUND</i> – A standard five-pulse ferroelectric sample characterization measurement that captures both switching (remanent + nonremanent) and non-switching (nonremanent) polarization (5C/cm²). Pulse width and voltage are under user control.4) <i>Leakage (optional)</i>– This Task captures the current through a sample induced by a steady-state, DC Bias voltage. Voltage and measurement duration are user-defined.5) <i>Fatigue (optional)</i> – This Task performs a series of stress/measure sequences. In the stress sequence the sample is submitted to a switching waveform. At the end of the waveform period, a PUND measurement is made to capture the sample’s polarization response. Each subsequent stress period may have its duration increased to better serve a logarithmic analysis.6) <i>Piezo-electric (optional)</i> – This Task captures a sample’s displacement as a function of voltage profile along with the sample’s polarization response. An external displacement measurement instrument must be attached to the tester to make this measurement. This Task is purchased separately. <p data-bbox="284 1491 593 1525"><u>Desired specifications:</u></p> <ol data-bbox="316 1565 1254 2033" style="list-style-type: none">a. Output Range ±200V and extended up to 10 KVb. 12-bit Arbitrary Waveform Generator outputc. 1KHz Hysteresis Frequency ->1-8th Hz Hysteresis frequencyd. Maximum Data Points 100 in 5mse. 500 points in 8 secondsf. Minimum Pulse Widths down to 500µs and up to 100msg. Software controlled output ramp for maximum accuracyh. Includes suitable Softwarei. 14 bit analogue to digital convertersj. Data Capture Rate - 50µs or betterk. Polarization, output voltage and SENSORS captured simultaneouslyl. Minimum charge sensitivity - 122fC or betterm. Maximum Charge - 12.2µC or better	01

- n. Measurement 14 bit analogue to digital converters
- o. Maximum hysteresis loop frequency 1KHz@+/-200V
- p. Minimum hysteresis loop frequency – 1/8thHz
- q. Compatible with Pyroelectric Current Measurement
- r. Hysteresis Waveforms Form
>Sine/Tri/Double/Mono/Arb/Pulse/Zero/Custom type.
- s. Compatible with future upgradation for Piezo and Magnetolectric 1 COMM +I²C
- t. External ±10V SENSOR inputs (Drive, Return, High Voltage Monitor, Voltage Sensor, Voltage Sensor)
- u. COMPUTER OF STANDARD MAKE LIKE HP, Dell or Lenovo should be supplied with a minimum 3GB RAM, 500GB Hard Drive with latest version of windows-based operating system, should be compatible with the data management software. Online UPS 3 KVa with minimum 30 mnts battery backup.
- v. Dedicated Training for two scientists at IISER, Mohali on the Ferroelectric Test systems.

II) Warranty: 1-year for all parts and labour from the date of installation.

OPTIONAL: Simple Test Station (without Optics)

NB:-

- I. The online updated Price BOQ is in INR format. If bidder want to quote other than INR please specify the quoted currency in the technical bid/part and fill the amount in same updated BOQ.
- II. Please bifurcate the price on shipping terms i, e, Ex-works -> FCA/FOB -> CIP/CIF in price BOQ and specify the same in technical bid without price.
- III. **Kindly do not quote for End of Life Model.**
- IV. **Kindly specify the weight of the product including weight of packing for assessment of Freight charges.**

SUBMISSION OF TENDER

- I. All bid/ tender documents are to be uploaded online at Central Public Procurement portal i.e. <https://eprocure.gov.in/eprocure/app> only and in the designated cover/ part on the website against tender ID. Tenders/ bids shall be accepted only through online mode and no manual submission of the same shall be entertained except tender fee and EMD. Late tenders will not be accepted.
- II. The online bids shall be opened at the office of the Assistant Registrar (P&S), IISER Mohali, on above given date and time. If the tender opening date happens to be on a holiday or non-working day due to any other valid reason, the tender opening process will be attended on the next working day at same time and place. IISER Mohali will not be responsible for any error like missing of schedule data while downloading by the Bidder.
- III. The bidder shall upload the tender documents duly filled in and stamped by the authorized signatory on each and every page. Tender not submitted/uploaded in the prescribed form and as per the tender terms and conditions shall be liable for rejection.
- IV. The bidder shall upload scanned copy of the PAN Card, GST number duly signed and stamped. **Also bidders applying against ‘MSME/NSIC Certificate’ issued by appropriate Authority, should ensure that the certificate attached is relevant to the area of service/supply. For example, If the tender is for “supply & installation of Desktop” the certificate should be issued for activity/area of “Computer supply and services activities etc” otherwise bid will be REJECTED without notice.**
- V. E-procurement system ensures locking on the scheduled date and time. The system will not accept any bid after the scheduled date and time of submission of bid.

INSTRUCTIONS

1. The Online bids should be submitted directly by the original manufacturer/supplier, If quotation is submitted/filled by any representative/agent/dealer then they must upload a authority certificate from the principal company for quoting the price otherwise such quotation will be rejected.
2. The quantity mentioned in this inquiry is and shall be deemed to be only approximate and will not in any manner be binding on the Institute. Before the deadline for submission of the online bid, IISER Mohali reserves the right to modify the tender document terms and conditions. Such amendment/modification will be notified on website against said tender ID.
3. The rates offered should be FOR Chandigarh/Mohali in case of firms situated outside Chandigarh/Mohali, and free delivery at the Institute premises in case of local firms. Supplier from outside India should mention the Ex-works/FOB/FCA/CIF/CIP price clearly. Conditional tenders will be summarily rejected.
4. In case of Ex-godown terms the amount of packaging forwarding freight etc. should clearly be indicated by percentage or lump sum amount. Institute has policy not to make any advance payments towards any purchase, Letter of credit can be opened if required.
5. THE INSTITUTE IS EXEMPTED FROM EXCISE AND CUSTOM DUTY under notification no-TU/V/RG/-CDE(1062)/201 CUSTOM DT.30.08.2016.
6. Tax: This Institute is not exempted from the payment of GST. The current rate (i.e. percentage of GST should be clearly indicated included or excluded) wherever chargeable. Please also provide/upload the copy of PAN card, GST number duly self-attested.
7. Concessional GST is applicable for all the items purchased for Research labs vide Ministry of Finance, notification no. 45/22017 dated 14.11.2017 and 47/2017 dated 14.11.2017.
8. Bidder/s quoting in currency other than **Indian Rupee (INR)** should explicitly mention the currency in which tender quoted wherever applicable in Technical Bid along the tender documents.
9. The delivery period should be specifically stated. Earlier delivery will be preferred.
10. The firms are requested to provide/upload detailed description and specifications together with the detailed drawings, printed leaflets and literature of the article quoted. The name of the manufactures and country of manufacture should also invariably be stated. In the absence of these particulars, the quotation is liable for rejection.
11. Validity of offer: 90 days. The minimum warranty period will be one year where not specified in along with Technical specification after satisfactory installation should be mentioned and firm should replace all manufacturing defect parts/ whole item under warranty without any extra cost including clearance, freight, taxes. Security deposit/ Bank Performance Guarantee @ 10 % of the value of supply order as per norms may be sought from the firms.
12. The right to reject all or any of the quotation and to split up the requirements or relax any or all the above conditions without assigning any reason is reserved by the IISER Mohali. For any corrigendum and addendum please be checked the website <https://eprocure.gov.in/eprocure/app> and <http://www.iisermohali.ac.in>
13. Disputes, if any, shall be subject to jurisdiction in the court of Mohali only.

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(Mukesh Kumar)
Assistant Registrar (P&S)