Indian Institute of Technology Kanpur
Department of Material Science & Engineering
Kanpur 208016, India

Dr. Tanmoy Maiti
Assistant Professor
Tel: +91-512-259-6599/6994
Email: tmaiti@iitk.ac.in

Date: 7 September 2015
Closing date: 14th September 2015
Ref. No. SERB/MSE/TM/2015-2016/03

Sub: Request for submission of quotation for LCR meter

For the Plasmonics and Perovskites Lab located in WL204A, it requires the quotation for a LCR Meter for electrical testing complying with or better than all of the specifications mentioned in **Appendix A**. The closing date for the above item is **5 PM, 14th September 2015.**

The prospective supplies are required to send quotation in two parts in sealed envelops, as "Technical Bid" and "Financial Bid". The Technical Bid should contain detailed technical specification of the product being offered and should not mention any prices. The Financial Bid should include the detailed price quotation clearly including the cost of the equipment, taxes, service charges if any, shipping and handling charges. The two separate and sealed envelopes should be clearly marked appropriately as "Technical Bid" and "Price Bid".

Terms and Conditions:

1. Maximum education discount, if any should be offered
2. Validity of quotation should be at least for 60 days
3. Prices should include delivery up to IIT Kanpur
4. Prices should be on **CIF and FOB separately** (if imported)
5. **Warranty** should be for at least **Two years** after installation**.**
6. Delivery period: **Within 6 weeks** from the date of purchase order
7. Normal payment terms for the Institute will be applicable (90% on delivery of the items and the remaining 10% after satisfactory installation/ inspection)
8. Quotation should carry proper certifications like agency certificate, proprietary certificate, etc.
9. An undertaking that the vendor will supply all the spares and services for the equipment for at least 5 years from the date of commissioning

Kindly send the Technical and Financial bids in sealed envelopes latest by **5 PM, 14th September 2015** to:

Dr. Tanmoy Maiti
409 Faculty Building
Department of Material Science & Engineering
IIT Kanpur, U.P. 208016, India.
E-mail: tmaiti@iitk.ac.in
Phone: 0512-259-6599 (O), 08004862506 (cell)

Appendix A
Technical Specifications for LCR Meter

Required Specification:**

Sr. No.	Parameter	Required Specification
1.	Description	LCR meter required for measurement of dielectric permittivity, inductance, capacitance and dielectric loss. • Frequency Range: DC, less than 5 Hz to 8 MHz • Impedance: 1 mΩ to 100 MΩ • Voltage: 10 mV to 5V rms • Built-in 40V DC Bias (or constant voltage source of up to 40V) • Accuracy of measurement: < 0.1% • Impedance analyzer should come with a blocking circuit for high DC field (10 kV).
2.	Model Name	Clearly mention make, model and model number of the equipment being offered.
3.	Connections	• Require 4 (four) BNC cable to BNC cable connection
4.	Interface	GPIB and RS-232C interface RS-232C cable to interface with computer (for data storage)
5.	External HV power source /amplifier/ controller	Quote ±10kV, external High Voltage Supply/ Amplifier/ Controller if the system doesn't come with built-in HV dc power source.
6.	Computer and Printer	**Quote as optional accessories:** • The LCR Meter should come with a high performance computer with the latest version of Windows operating system. • Minimum Configuration: Intel core i3 processor, 4GB RAM, 500 GB Hard Disk, 24" Display with other essential peripherals • Laser printer should be provided with the computer
7.	Power Supply and UPS	**Quote as optional accessories:** • Specify the requirements of the power supply for the offered Cryostat • Quote for UPS with the minimum back-up of 30 or 15 minutes to run the equipment
8.	Software	• The instrument should be installed with latest available version of software for control, operation and analysis. • The supplier should upgrade the software as and when the upgradations become available for at least five years from installation • Should have intelligent calibration logic • Continuous automatic hardware diagnosis
9.	Standards and Calibration	• Provide sample standard materials with known high and low impedances • The LCR Meter should be pre-calibrated • Specify extent of calibration required and traceability and validity of calibration at the time of installation • Specify calibration requirements after the initial validity
10.	Documentation	• Two sets of operating manual for the equipment and control system should be provided in hard copies • A soft copy of the above manuals should also be provided in a CD/DVD
11.	Safety Norms	• The instrument should be compliant with international norms for safety and environment
12.	Installation,	• The delivery of the LCR meter should be considered complete only

Appendix A
Technical Specifications for LCR Meter

	Commissioning and Training	after successful commissioning of the instrument • The pre-installation requirements should be communicated to IIT Kanpur well in advance of the installation
13.	LCR meter in India	Provide the list of institutes in India where same model of LCR meter is installed.
14.	Sample holder	**Quote as optional accessories:** Should provide a sample holder for measurement of bulk sample at room temperature for testing in the frequency range DC to 8MHz
15.	Probe/ Connectors	**Quote as optional accessories:** • Optional 4-terminal probe and • optional pincher probe • GPIB cable for data transfer
16.	**After-sales Service**	a. The supplier should provide a prompt after-sales service such as regular instrument maintenance, troubleshooting and fixing b. The list of service centers in India should be included.
17.	**Warranty**	Must have warranty for at least **two years**
****Additional optional accessories should be indicated separately along with their price. The above specs are desirable and the actual numbers achievable for your system should be indicated.**		

Department of Materials Science and Engineering
FB 409, Indian Institute of Technology Kanpur, Kanpur-208016
Ph: +91-512-259-6599; Fax: +91-512-259-7505