

INDIAN ASSOCIATION FOR THE CULTIVATION OF SCIENCE

2A & 2B , Raja S.C. Mullick Road, Jadavpur, Kolkata-700032

NIT No.: IACS/CSS/KDMR/103 Date: 27/12/2021

Sealed tender in two bids system (**Technical Bid & Financial bid**) is invited from bonafide, resourceful and eligible manufacturer/exclusive distributor/vendors for supply and installation of **Impedance Analyzer** with necessary accessories.

Part-I (Technical Bid) of the tender should contain technical specifications in detail as well as commercial terms and conditions. Part-II (Price Bid) should clearly indicate group-wise price, if needed, as mentioned in the technical bid. The Technical Bid and Price Bid are to be submitted in separately sealed envelopes, distinctly marked accordingly and both to be put inside another envelop, that should be sealed and superscribed with tender notice no. and due date. The bidders may submit bids duly signed in their own letterheads.

Completed tender bids should reach the office of the **Registrar, Indian Association for the Cultivation of Science (IACS), 2A & 2B Raja S. C. Mullick Road, Jadavpur, Kolkata-700032** on or before the scheduled date and time specified below:

Tender Notice No.	NIT No.IACS/CSS/KDMR/103 Date: 27-12-2021
Last date and time of submitting tender	18.01.2022 (1.30 PM)
Pre-bid meeting (online mode) to discuss technical specification and detail presentation by the representative(s) of the interested companies on the technical specifications of their instrument and application with representative data acquired in their instrument elsewhere.	07.01.2022 @2.30 PM through online mode (Interested bidders need to send participation request before 06/01/2022 to trckdmr@iacs.res.in ; Meeting link will be sent upon receiving the request)
Date and time of opening tender (Technical Bids)	18.01.2022, at 3.00 PM
Place of opening tender	IACS Meeting Room
Date and time of opening of Price Bid	The Price Bids of the bidders qualifying the technical bid will only be opened, the date of which will be intimated to the short-listed bidders at their email addresses. The rest of the bids will be rejected.
Contact	Email: trckdmr@iacs.res.in Tel.+91 33 2473 4971 [Ext 2153]

The technical bids will be opened first to judge/evaluate the technical specifications of the said instrument and thereafter the price bids of only technically qualified bidders will be opened.

Technical Bid Evaluation: The Technical Bids will be evaluated in the presence of the representatives of intending bidders who will be able to clarify technical aspects of their bids, if any, required by the Technical Evaluation Team.

Opening of price-bid: The Price Bids of the bidders qualifying the technical bid will only be opened, the date of which will be intimated to the short-listed bidders at their email addresses. The rest of the bids will be rejected.

Please note that IACS will not provide any accommodation or reimburse any expenses to any of the bidders for attending opening of technical bid.

Quotations received incomplete or beyond the stipulated time will be summarily rejected.

Bidders should submit their past experience for supplying and successful installation of similar units to other research Institutes/Universities/other organizations in India and abroad. Please provide documentary proofs of such successful installation and supportive documents that the instruments are running successfully.

For evaluation of L1 (least price) amongst the technically qualified bid only, the price of optional item will be considered in the event the committee decides to procure it. If the committee decides not to procure the optional items, then the cost of those optional items will not be included in evaluation of L1.

1. TECHNICAL BID

The technical bid should contain technical specifications and should be kept in a separate sealed envelope duly superscribed as 'TECHNICAL BID' on the outer cover of the envelop as already detailed above. **It should be clearly mentioned on the envelope as "Technical Specification for Impedance Analyzer".**

Specifications for Impedance Analyzer

S.No.	Name	Specifications
1.	Electrochemical Impedance Spectroscopy (EIS) frequency	10 μ Hz to 5 MHz
2.	DC voltage ranges	From 0 to ± 14 V software-controlled
3.	Overall bandwidth: DC	6 MHz or more
4.	AC amplitude	0 - 6 V with high bit resolution
5.	Frequency generator & analyzer	
5.1	Frequency range	10 μ Hz to 5 MHz
5.2	Accuracy	0.0025% or better
5.3	Resolution	0.0025% or better
6.	Output potentiostatic	
6.1	Controlled voltage	From 0V to ± 14 V or better
6.2	Resolution	2.5 nV or better
6.3	Accuracy	± 200 μ V or better
7.	Output galvanostatic	
7.1	Current range	± 1 nA to ± 2 A or better
7.2	Resolution	32 bit, ± 0.2 ppb or better
8.	Input impedance	10 T Ω ± 5 pF or better
9.	Input leakage current	Less than ± 200 fA or better
10.	Current Resolution	± 5 atto A or better
11.	Slew rate	10 MV/s or better
12.	Small signal rise time	100 ns or better
12.	Warranty	One year warranty
13.1	Service Facility	Service Facility within India is a must,

		while service engineering stationed at Kolkata will be preferred.
13.2	Compatibility	Impedance Analyzer should be compatible to integrate with model PS-100 tabletop cryogenic probe station from Lakeshore

14. Impedance Analyzer should be compatible with low-temperature Impedance measurements along with model PS-100 tabletop cryogenic probe station from Lakeshore and necessary accessories should be included in the quotation.

15. Software requirements

15.1 The impedance analyzer equipment being quoted should be supplied with an easy-to-use software interface, modular hardware design that allows for rapid user training and should also be easy to change from one measurement mode to another with relative ease.

15.2 The software suit should have the option for EIS simulation and data fitting with theoretical simulation features.

16. Terms and Condition

16.1 The vendor is responsible for the installation of the system at the institute.

16.2 The price quotation should include the cost of installation and training of potential users.

16.3 The instrument should be installed and integrated with the model PS-100 tabletop cryogenic probe station from Lakeshore.

16.4 The price quotation should include up to the delivery of the instrument to the institute.

16.4 All Custom duty and service taxes must be paid by the respective company.

16.6 All guaranteed specifications will have to be demonstrated, upon request, in an active installation. Failure to demonstrate any promised specifications will be deemed as technical non-compliance.

➤ **All essential consumables required for sample preparation during training and demonstration need to be provided.**

*Installation and Application Training by factory trained personnel.

*Any other equipment/device/tools whichever are necessary for installation and operation of the complete System.

*Tender will not be accepted if the technical compliance chart is not provided following the given format below:

Sr. No	Tender specification	Your offered instrument specification	Extent of compliance

Important notes:

- i) Vendor should quote rates involved, if any, for the Optional Items/services mentioned separately.
- ii) Bidder providing misleading or wrong information will be disqualified
- iii) All technical claims of the Bidder should be supported by product catalogue, public website of the manufacture.
- iv) Qualified vendor will be required to undertake the room refurbishment for proper installation of the system. IACS will provide the space with electrical connection. The vendor will be required to install the necessary tables and other furniture as required by the instruments.
- v) The above-mentioned technical specifications are highly desirable. However, the Institute reserves the right to go for customized specifications taking into considerations its financial constraints and technical preferences.

2. PRICE/ FINANCIAL BID

The financial bid indicating (item-wise) price for the item(s) mentioned in the technical bid should be kept in a separate sealed envelope duly super scribed as 'PRICE BID' on the outer cover of the envelop as already detailed above. Price bids of only technically qualified bidders will be opened and they will be intimated the date and time of the opening of price bid at their e-mail ids. Rest of the bidders will stand rejected.

PRICE: Price to be quoted on INR (The Indian Rupee) in FOR destination basis.

3. BID SECURITY:

- a. An Account payee Demand Draft/Pay Order of Nationalized Indian Bank for Rs. 40,000 (Rupees Forty Thousand only) drawn in favour of "Indian Association for the Cultivation of Science (State Bank of India, Jadavpur University Branch, A/C No. 11079699211, IFSC: SBIN000093, MICR Code: 700002048)" is to be furnished by the bidders along with Technical Bid except those who are registered with the Central Purchase Organizations, National Small Industries Corporation or the concerned Ministry or Department, as Bid Security money or Earnest Money Deposit (EMD). Alternatively, the Bidder shall have the option to furnish the EMD in the format of Bank Guarantee (BG) of any Indian Nationalized Bank preferably located at Kolkata.
- b. The Demand Draft for the Bid-Security should have at least about 90 (ninety) days validity period of opening of the bids.
- c. In case of non-award of the work the Bid Security money would be returned to the unsuccessful Bidders.

4. PERFORMANCE SECURITY:

An Account Payee Demand Draft on any nationalized bank of India or Bank Guarantee (BG) of any Indian Nationalized Bank preferably located at Kolkata of 10% of the order value in the name of "Indian Association for the Cultivation of Science" is to be furnished by the successful bidder as Performance security. Performance security money should remain valid for a period of 60 days beyond the date of completion of all contractual obligations of the supplier including warranty obligations. Bid security money or EMD will be refunded to successful bidder on receipt of the Performance security money.

5. TERMS OF PAYMENT:

Payment will be made through irrevocable Letter of Credit in two installments. 90% of the money will be released on submission of shipping of documents. Remaining 10% will be released after successful installation of the instrument.

6. GENERAL INSTRUCTIONS:

1. Validity of tender: Tender submitted should remain valid for at least six months from the date of opening the tender. Validity beyond six months from the date of opening of the tender shall be lapsed by mutual consent.
2. The tender should accompany a compliance chart.
3. Incomplete and conditional tenders as well as tenders received after the due date will be summarily rejected without assigning any reasons thereof.
4. At any time prior to the bid due date, IACS may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder during pre-bid meeting, modify the bidding documents. The amendment(s) will be notified on the institute website. Prospective bidders are advised to occasionally visit the website (www.iacs.res.in/tender) for any amendment.
5. Installation/Demonstration/Application training at site: Installation & user training at IACS, free of cost by the supplier.
6. Service facility: In India, preferably Kolkata, supplier should mention their details of service setup and man powers who are responsible for after sales support. Response time should be within 24 hrs.
7. The model number, make and a printed literature of the product should be submitted positively.
8. Proposed delivery schedule should be mentioned clearly.
9. Manufacturers / exclusive distributors/vendors should have history of supplying this type of instruments to this or other scientific organizations. Availability of a list in this regard would be preferred.
10. Authorized dealership certificate should be provided in case of principal manufacturing company is not quoting directly.
11. Guarantee certificate, users manuals etc. are to be handed over to the user after successful commissioning of the system.
12. In the event of date being declared a closed holiday for purchaser's office, the due date for submission of bids and opening of the technical bids will be the following working day at the appointed time.
13. In case of any dispute, the decision of IACS authority shall be final and bidding on the bidders.
14. For any clarification regarding technical specifications, information etc., please send your queries to trckdmr@iacs.res.in
15. The authority of IACS reserves the right to reject any or all of the tenders received without assigning any reason thereof.

Acting Registrar