

**DR. S. S. BHATNAGAR UNIVERSITY INSTITUTE OF CHEMICAL
ENGINEERING AND TECHNOLOGY, PANJAB UNIVERSITY, CHANDIGARH**

No. SSBUI CET/TEQIP-III/2019/355
Date: 09.07.2019

To,

Sub: Inviting Quotations for purchase of ELECTROCHEMICAL WORKSTATION- 1 No.

Dear Sir/Madam,

You are invited to submit your most competitive quotation for the following goods with item wise detailed specifications given at **Annexure I**,

Sr. No	Brief Description	Quantity	Delivery Period(In days)	Place of Delivery	Installation Requirement (if any)
1.	ELECTROCHEMICAL WORKSTATION	1	45	Dr. SSBUI CET , Panjab University, Chandigarh	Will be done at site

1. Government of India has received a credit from the International Development Association (IDA) towards the cost of the **Technical Education Quality Improvement Programme[TEQIP]-Phase III** Project and intends to apply part of the proceeds of this credit to eligible payments under the purchase for which this invitation for quotations is issued.
2. **Quotation: -Should be submitted under two bid system (Technical and Financial Bid).**

The Technical bid envelop will contain following documents.

- i. Make and Model offered, its features and complete specifications.
- ii. Govt. Universities/Institutes to whom this equipment has been supplied in last two years ending March 31, 2019 and name of the contact persons along with their phone no's.
- iii. The turn over of the company /firms for the last three years ending March 31, 2019.
- iv. Name of your Principal supplier/ Manufacturer.

Note: Price should not be indicated in the Technical bid otherwise the bid will be rejected.

3. Financial bid envelop will contain financial bid on one prescribed Performa as mentioned in Annexure-2

- i. **Both sealed envelopes of Technical and financial bid** may be sealed in one bigger Envelop and sent to **Project Head TEQIP-III, Dr. SSBUI CET, Panjab University, Chandigarh** on or before due date and time.
- ii. The **Technical bid will be opened first** and after evaluating the same according to our requirement and desired documents, price bid will be opened for those who qualify technically.

4. Terms and Conditions

- a. Price should be quoted separately for each item.
- b. The software up gradation should be free of cost throughout life.
- c. Warranty : 3 years
- d. There should be minimum 10 installations of this instrument in Govt. institutions in India.
- e. Supply the user list with complete address, phone number and e-mails.
- f. Any other accessory required for smooth working of Electrochemical workstation should be provided.
- g. Corrections, if any, in specifications for matter offered and rates & terms and conditions shall be made by crossing out, initialing, dating and re-writing.
- h. All duties and other levies payable by the supplier under the contract shall be included in the unit price.
- i. Applicable taxes shall be quoted separately for all items.
- j. The prices quoted by the bidder shall be fixed for the duration of the contract and shall not be subject to adjustment on any account.
- k. The Prices should be quoted in Indian Rupees only.**
- l. Each bidder shall submit only one quotation.
- m. Quotation shall remain valid for a **period not less than 6 months** after the last date of quotation submission.
- n. Conditional and unsigned quotation will not be accepted.
- o. CMC (Comprehensive Maintenance Contract) for the equipment **should be at least for expiry period of 3 years, and an additional of 2 years (optional) may be provided after warranty period.**
- p. The Tenderer must ensure that the equipment being offered is a new one and not refurbished or repaired one.
- q. If any of the equipment supplied by the Tenderer is found to be substandard/ refurbished or not in accordance with the description /specification or otherwise faulty, the institute has the right to reject the equipment or its part(s). The prices of such equipment shall be refunded by

the vendor with 18% interest if such payments for such equipment has already been made to him.

- r. All damaged or unapproved goods shall be returned at suppliers cost and risk and the incidental expenses incurred thereon shall be recovered from the supplier. Defective part in equipment, if found before installation and/or during warranty period, shall be replaced within 45 days on receipt of the intimation from the TEQIP office at the cost and risk of supplier including all other charges.
- s. In case of any loss/damage to equipment and supplies during the transportation from the origin of equipment to the installation site, the supplier has to replace it with new equipment/supplies immediately at his own risk. Supplier will settle his claim with the insurance company as per his convenience. Dr. SSBUI CET will not be liable to any type of losses in any form.
- t. The offering firm should clearly mention whether they are the manufacturer or authorized agent/dealer of the manufacturer.
- u. The Tenderer should mention in the *Technical bid* the response time for attending to a complaint about the equipment by TEQIP office.
- v. **Price should be F.O.R.**

5. Evaluation of Quotations

The Project Head, TEQIP-III will evaluate and compare the quotations determined to be substantially responsive and technically acceptable.

- a. are properly signed ; and
- b. Confirm to the terms and conditions, and specifications.

6. The Quotations would be evaluated for all items together.

Award of contract:

The Project Head TEQIP-III will award the contract to the bidder whose quotation has been determined to be substantially responsive and who has offered the lowest evaluated quotation price.

- a. Notwithstanding the above, the Project Head, TEQIP-III, Dr. SSBUI CET, Panjab University reserves the right to accept or reject any quotations and to cancel the bidding process and reject all quotations at any time prior to the award of contract.
- b. The bidder whose bid is accepted will be notified of the award of contract by the Head TEQIP-III, Dr. SSBUI CET, Panjab University, prior to expiration of the quotation validity period. The terms of the accepted offer shall be incorporated in the purchase order.

7. Payment shall be made in Indian Rupees as follows:

Delivery and Installation - 90% of total cost

Satisfactory Acceptance - 10% of total cost

8. All supplied items are under warranty of **2-5** Years from the date of successful acceptance of items.
9. You are requested to provide your offer latest **on or before 29.07.2019 by 04:00 PM.**
10. Detailed specifications of the items are at Annexure I.
11. Any other accessory required for smooth working of Electrochemical workstation.
- 12. Training Clause (if any)**

Two weeks training should be provided free of charge at the premises of Dr. SSBUI CET out of which one week should be on equipment usage & software and one week on maintenance
13. **Testing/Installation Clause (if any):**The equipment and software should be installed and tested to the specifications *free of cost.*
14. CD/Information brochures/ Product catalogue, if any must be accompanied with the quotation clearly indicating the model quoted for in Technical Bid. A set of User's manuals and Service manuals of the main instrument, attachments and related equipment should be supplied with the equipment.
15. Sealed quotation to be submitted/ delivered at the address mentioned below,
**TEQIP CELL,
2nd Floor, Dr. S. S. Bhatnagar University Institute of Chemical Engineering & Technology,
Panjab University, Chandigarh-160014**
16. Tenders received after the due date will not be accepted. If the last date for submission of Tender falls on any declared holiday in the University, the next working day will be considered as the last date for the same.
17. Telegraphic/electronic/conditional offers will not be accepted.
18. We look forward to receiving your quotation and thank you for your interest in this project.

(Authorized Signatory)

Name & Designation

Annexure I

TECHNICAL SPECIFICATIONS OF ELECTROCHEMICAL WORKSTATION

1. **Multichannel System for up to 07 potentiostat and galvanostat or more.**

2. **No of Channels required: 3 No.**

S.No	Instrument Specifications	Qty
1.	Compliance voltage: ± 12 V or better at ± 400 mA or more Maximum Output Current: ± 400 mA or better at ± 12 V or more Output Voltage Range: ± 10 V or more Current Ranges: smallest current range: ± 15 nA to current range 100 mA in multiple ranges or more Potentiostat Rise/fall Time: 500 ns or better Interface: USB interface for connection with PC	
2.	Hardware for EIS measurements Hardware and software for EIS measurements in potentiostatic and galvanostatic control, over frequency range of 10 μ Hz to 1 MHz. It should be possible to perform EIS measurements over entire frequency range from 10 μ Hz to 1 MHz upto 400 mA currents. Data presentation: Nyquist, Bode, Admittance, Dielectric, Mott-Schottky, Data analysis: Fit and Simulation, Find circle, Element subtraction	1 No
3.	Hardware for Bipotentiostatic measurements Module for conversion of the system into a two channel potentiostat with two working electrodes sharing the same AE & RE	1 No
4.	Rotating Ring Disc Electrode for Bipotentiostatic Hydrodynamic Measurements Specifications: Speed control Manual and software, Motor speed range 150 - 8,000 RPM or more, Manual speed setting 150 - 8,000 RPM or more RPM in 1 RPM steps, Acceleration/deceleration: 3800 RPM or better, Maximum current: 400 mA or better RRDE Tips: GC Disc and Pt Ring –2 no.	1 No
5.	Electrochemistry Cell It should consist of the following: 10 mL to 80 mL Glass cell—5 Nos. 300 mL--2 no. Disc working electrodes with active area diameter 3 mm of GC ,Pt and Au ---5 Nos. each Pt wire Counter electrode ---5 Nos. Ag/AgCl reference electrode double junction type for use in aqueous and Non-Aqueous media---5 Nos. Polishing kit and gas purging accessories---2 Nos.	1 No

6.	<p>Electrochemical Software:</p> <p>Software should have facility to record additional signal viz EQCM, bi-potentiostat etc. Import/export ASCII. Ready-to-use Vis & Generic interface for .Net applications should be included. The software should support following basic electrochemical measurements: Cyclic Voltammetry, Sampled DC Voltammetry. Tafel Plots, Differential Pulse Voltammetry, Square Wave Voltammetry. Electrochemical methods like Chrono-Amperometry, Chrono-Coulometry & Chrono-Potentiometry etc.</p>	
7.	<p>The software upgradation should be free of cost</p>	
8.	<p>Booster:</p> <p>The current booster with current range of ± 8 A or better and compliance voltage of ± 12 V or better with operation mode both Potentiostatic & Galvanostatic</p>	
9.	<p>Computer & Printer:</p> <p>Compatible branded PC with i5 configuration, 2 KVA Online UPS with one hour back up should be quoted</p>	
10.	<p>Others :</p> <ol style="list-style-type: none"> 1. Photo-electrochemical H-Type Cell for studying HER & OER catalysis of water-splitting 2. Standard corrosion kit with all necessary cables, cells, electrode etc 3. Screen Printed Electrodes 100 each for Au, C, Pt with necessary cable for attachment with the instrument 4. Any other accessory required for smooth working of Electrochemical workstation. 	
11.	<p>Nitrogen Cylinder with regulator</p>	2 No.'s
12.	<p>Optional Accessories:</p> <ol style="list-style-type: none"> 1. Photo kit for Photo-modulated Impedance Measurements on Solar Photovoltaic devices: Photo kit consisting of Optical bench with ruler, Calibrated photodiode holder, LED cover holder, One standard LED with kit and others wavelength LED's. 2. Solar simulator for I/V characteristics: Collimated beam of 25 mm diameter with a uniformity of $\pm 5\%$ Class A, All optics should be fixed, so that no adjustments are required, Lamp of high pressure Xenon short arc, 150 W ,Irradiance 1 sun (min.) @ 80 mm, In-built shutter with driver 	

ANNEXURE-2
FORMAT FOR QUOTATION SUBMISSION
(On the letterhead of the supplier with seal)

To _____

Date: _____

Sl. No.	Description of goods (with full Specifications)	Quantity	Unit	Quoted Unit rate in Rs.(Including Ex-Factory price, excise duty, packing and forwarding, transportation, insurance, other local costs incidental to delivery and warranty/ guaranty commitments)	Total Price (In INR only) (A)	Sales tax and other taxes payable	
						In %age	In Figures (B)
Total Price							

Gross Total Cost (A+B) (in INR):

- i. We agree to supply the above goods in accordance with the technical specifications for a total contract price of Rs. _____ (Amount in figures) (Rupees _____ amount in words) within the period specified in the Invitation for Quotations.
- ii. We confirm that the normal commercial warranty/ guarantee of _____ months shall apply to the offered items and we also confirm to agree with terms and conditions as mentioned in the Invitation Letter.
- iii. We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in bribery.

Signature of Supplier

Name: _____

Address: _____

Contact No: _____