INVITATION FOR QUOTATION

TEQIP-II/2016/1AMU03/Shopping/Potentiostat/Galvanostat 05-Mar-2016

To,

____________________
____________________

Sub: Invitation for Quotations for supply of Goods

Dear Sir,

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

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Brief Description</th>
<th>Quantity</th>
<th>Delivery Period(In days)</th>
<th>Place of Delivery</th>
<th>Installation Requirement (if any)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Potentiostat/ Galvanostat with Impedance Analyzer</td>
<td>01</td>
<td>30</td>
<td>Dept. of Petroleum Studies Z.H. College of Engg. &amp; Tech. A.M.U., Aligarh</td>
<td>Yes</td>
</tr>
</tbody>
</table>

2. 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 II Project and intends to apply part of the proceeds of this credit to eligible payments under the contract for which this invitation for quotations is issued.

3. Quotation,

3.1 The contract shall be for the full quantity as described above.

3.2 Corrections, if any, shall be made by crossing out, initialing, dating and re writing.
3.3 All duties and other levies payable by the supplier under the contract shall be included in the unit price.

3.4 Applicable taxes shall be quoted separately for all items.

3.5 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.

3.6 The Prices should be quoted in Indian Rupees only.

4. Each bidder shall submit only one quotation.

5. Quotation shall remain valid for a period not less than 30 days after the last date of quotation submission.

6. Evaluation of Quotations,

   The Purchaser will evaluate and compare the quotations determined to be substantially responsive i.e. which

   6.1 are properly signed; and

   6.2 confirm to the terms and conditions, and specifications.

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

8. Award of contract:

   The Purchaser 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.

   8.1 Notwithstanding the above, the Purchaser 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.

   8.2 The bidder whose bid is accepted will be notified of the award of contract by the Purchaser prior to expiration of the quotation validity period. The terms of the accepted offer shall be incorporated in the purchase order.

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

   **On Completion - 100% of total cost**

10. All supplied items are under warranty of 12 months from the date of successful acceptance of items.

11. You are requested to provide your offer latest by 12:30 hours on 22-Mar-2016.
12. Detailed specifications of the items are at Annexure I.

13. Training Clause (if any) **Yes**

14. Testing/Installation Clause (if any) **Yes**

15. Information brochures/ Product catalogue, if any must be accompanied with the quotation clearly indicating the model quoted for.

16. Sealed quotation to be submitted/ delivered at the address mentioned below,
   Principal, Z.H. College of Engg. & Tech. Aligarh Muslim University, Aligarh-202002, UP

17. We look forward to receiving your quotation and thank you for your interest in this project.

18. The bidder should have registration as supplier with Aligarh Muslim University or must have DGS&D Registration/ registration with any Central Govt. organization.

**19. Quoted amount should be in Indian Rupees only.**

**Note:** Please indicate the quotation reference no. (given at the top of page 1 of this letter) on the quotation envelope.

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**(Authorized Signatory)**

Prof. M. Jawaid Siddiqui, Coordinator TEQIP-II

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**Annexure I**

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Item Name</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Potentiostat/ Galvanostat with Impedance Analyzer</td>
<td>Specification for Potentiostat/Galvanostat with Impedance Analyzer &amp; other accessories&lt;br&gt;Computer controlled Potentiostat &amp; Galvanostat. The system should have following specifications&lt;br&gt;Maximum Compliance Voltage: ±30Volts at ±2A&lt;br&gt;Maximum Output Voltage: ±10 Volts&lt;br&gt;Measured Voltage Resolution: 0.3μV&lt;br&gt;Maximum output current: ±2A at ±30Volts&lt;br&gt;Measured current resolution at 10nA range: 30 fA&lt;br&gt;Potentiostat bandwidth (at 1 kOhm, 1mA): 1 MHz&lt;br&gt;Potentiostat rise/fall time (1 V step, 10-90%): &lt;250 ns&lt;br&gt;Input impedance of electrometer: &gt; 1TOhm // 8 pF&lt;br&gt;Input bias Current @ 25°C: &lt;1 pA&lt;br&gt;Bandwidth of electrometer: &gt; 4 MHz&lt;br&gt;A/D converter: 16 bit gains of 1, 10,100 &amp; 1000; D/A converter: 16 bit 4 ch.&lt;br&gt;External input/output signals: 2; Digital I/O lines: 48</td>
</tr>
</tbody>
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**EIS module (Impedancy Measurement)**

Hardware and software for EIS measurements in potentiostatic and galvanostatic control, over a wide frequency range of 10 $\mu$Hz to 1 MHz. It should be possible to perform EIS measurements over entire frequency range from 10 $\mu$Hz to 1 MHz upto 2A currents.

Signal generator frequency range 10 $\mu$Hz - 30 MHz, Frequency range in 10 $\mu$Hz – 1 MHz combination with potentiostat galvanostat. Frequency resolution 0.003%, Input range ± 10 V, AC amplitude 0.25 mV to 0.30 Vrms in potentiostatic mode, 0.0002 - 0.3 times current range in galvanostatic mode. Data presentation: Nyquist, Bode, Admittance, Dielectric, Mott-Schottky, Data analysis: Fit and Simulation, Find circle, Element subtraction, Kramers-Kronig,

**Basic Electrochemical Cell Setup**

Base plate with stand rod
Thermostated Cell Vessel (50-150ml)
Cell vessel lid with sleeve
Stoppers,
2 mm diameter Pt Electrode
Aq. Ag/AgCl Reference Electrode
Calomel Reference Electrode
Pt Wire Counter Electrode,
Polishing Set

**Electrochemical Software:** 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. It should have facility to display up to 4 plots simultaneously. Comparison with previous experiments should be possible while experiments are in progress.

The software should support following basic electrochemical measurements: Cyclic Voltammetry with scan rates from 10 $\mu$V/Sec to 200V/Sec, Sampled DC Voltammetry. Tafel Plots, Differential Pulse Voltammetry, Square Wave Voltammetry. Electrochemical methods like Chrono-Amperometry, Chrono-Coulometry & Chrono-Potentiometry.

Make like: Bio Logic, Solartron, Metrohm Autolab, Zahner etc
FORMAT FOR QUOTATION SUBMISSION
(In letterhead of the supplier with seal)

Date: _______________

To:

Sl. No. | Description of goods (with full Specifications) | Qty. | 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 (A) | Sales tax and other taxes payable

| In % | In figures (B) |

Total Cost

Gross Total Cost (A+B): Rs. ________________

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.

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.

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: ______________

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