



# Indian Institute of Technology Madras

I.I.T.P.O., MADRAS-600 036

STORES & PURCHASE SECTION

## Form for Inviting Quotations

Ref.No.

Date: 30 Jan 2017

CHE	2017	AK	potentiostat
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Under Certificate of Posting

Dear Sirs,

DUE DATE: 13 Feb 2017

Extended  
to 20 FEB 2017.

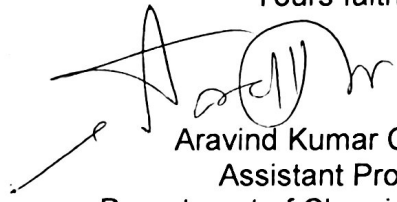
1. Quotations are invited in duplicate for the various items shown below / overleaf / Enclosed list. Quotation should contain two separate parts, a technical offer and a commercial offer, enclosed in a single envelope.
2. The Quotations duly sealed and superscribed on the envelope with the reference No. and due date, should be addressed to the undersigned so as to reach him on or before the due date stipulated above.
3. The Quotations should be valid for sixty days from the due date and the period of delivery required should also be clearly indicated.
4. If the item is under DGS&D Rate contract No. and the price must be mentioned. It may also please be indicated whether the supply can be made direct to us at the Rate contract price (Please note that we are not Direct Demanding Officers). If so please send copy of the RC.
5. Relevant literature pertaining to the items quoted with full specifications (and drawing, if any) should be sent along with the Quotations, wherever applicable. Samples if called for, should be submitted free of charges, and collected back at the supplier's expenses.
6. Local Firms : Quotations should be for free delivery to this Institute. If Quotations for Ex-Godown delivery charges should be indicated separately.
7. Firms Outside Madras : Quotations should be for F.O.R. Madras. If F.O.R. consignor station, freight charges by passenger train / lorry transport must be indicated. If Ex-Godown, packing, forwarding and freight charges must be indicated.
8. The rate of sales / General Taxes and the percentage of such other taxes legally leviable and intended to be claimed should be distinctly shown along with the price quoted. Where this is not done, no claim for Sales / General Taxes will be admitted at

DEADLINE EXTENDED to 20 FEB 2017

any stage and on any ground whatsoever The taxes leviable should take into consideration that we are entitled to have concessional Sales Tax applicable to non Government Educational Institutions run with no profit motive for which a concession. Sales Tax Certificate will be issued at the time of final settlement of the bill.

9. Goods should be supplied carriage paid and insured.
10. Goods shall not be supplied without an official supply order.
11. Payment : Every attempt will be made to make payment within 30 days from the date of receipt of bill / acceptance of goods, whichever is later

Yours faithfully,

 30 JAN 2017  
 Aravind Kumar Chandiran  
 Assistant Professor  
 Department of Chemical Engineering  
 Indian Institute of Technology  
 Chennai-36.

Enclosure:

1. Technical Specifications.

Address to which the quotations has to be sent-

Dr. Aravind kumar Chandiran  
 CHL 212 / CHL 206A, Chemical Engineering Laboratory  
 Department of Chemical Engineering  
 IIT - MADRAS,  
 Chennai, Tamil Nadu - 600 036.  
 Ph: +91 - 8056380100  
 +91 - 2257 4154

Email: aravindkumar @ iitm.ac.in  
 aravindkumar @ gmail.com

30/Jan/2017

CITE / 2017 / AIC / Potentioskop

### Specification for Electrochemical Workstation with Impedance Analyzer

Number of channels required: 2.

#### **Fundamental requirements:**

1. Each of the channels should be independent & operate simultaneously
2. Channels must have floating facility
3. Instrument should operate in Bi-stat, compatible to work with RDE and RRDE

#### **Channels configuration:**

4. Applied Current limit: 1 nA to 400 mA or more
5. Current resolution : 1 pA
6. Applied voltage range; +/-9 V or more
7. Voltage resolution: 2  $\mu$ V or better
8. EIS Freq Range: few  $\mu$ Hz to 6 MHz
9. AC amplitude : 1 mV to 2.5 V with the resolution of 5 mV
10. Modes: Single and multisine should be available
11. Data acquisition rate: 800000/Second
12. Optional accessories for electrochemical measurements shall be made available.

#### **Software requirements:**


- Voltammetry techniques- Cyclic Voltammetry(CV), Multiple CV, Square Wave Voltammetry, Staircase Voltammetry
- Pulse techniques - Differential Pulse Voltammetry, Normal Pulse Voltammetry (NPV), Reverse-NPV, Chronoamperometry , Chronopotentiometry
- Corrosion - Potentiostatic/Galvanostatic-Galvanodynamic, Linear Polarization Resistance and Tafel
- Energy: Charge/Discharge Constant Potential, Constant Current, Constant Power, Constant Resistance/Load, and Calculation Efficiency of Cycle.
- EIS: frequency sweep – Log / linear, Sweep DC bias with frequency equivalent and circuit fitting software should be available.
- A complete software package consisting of Battery/Super capacitor/Fuel cell/Photovoltaic/Voltammetry corrosion EIS Software is required.
- Equivalent circuit fitting software is required.

System should be able to control through multiple computers – preferably through Ethernet.

System should have external device control / data recording facility – for 10V range

A compatible laptop with a minimum of i-5 Processor, 4GB RAM, 500GB HDD, and Windows operating system (Windows 7 or latter versions) for instrument control and data acquisition is required.

Warranty : Minimum 1 year

  
ARAVIND kumar CITANDRAN

30 Jun 2017.