University of Calcutta

Department of Polymer Science and Technology

NOTICE

No. Tender Notice /Polymer Sc. & Tech./PS/DBT/01

Sealed Quotations are invited from the established vendors for an **Electrochemical Analyzer** with following specifications.

Multichannel Electrochemical Workstation with four number channels and two impedance modules

Technical Specifications:

1. Compliance voltage Range: ± 18V or more
2. Current Range: ±350mA or better
3. Applied potential range: ± 10mV to 10V
4. Gain Band width: 1MHz or more
5. Bandwidth of potentiostat: >1MHz
6. Input impedance ≥ 100 G-Ohm
7. Input Bias current <1pA
8. Current ranges: 1nA to 350mA
9. Resolution at nA range: 30fA
10: System rise time: <300 ns
11. Potential resolution: 3µ volt or better
12. Interface: USB
14. EIS range: 10µHz to 1 MHz, up to 350mA
15. AC Amplitude: 0.2 mV to 350mV or better;
16. Frequency Resolution: 0.003% or better

17. **Electrochemical software:** The system should be supplied with the software capable of performing following electrochemical techniques:

Cyclic Voltammetry (CV), Linear Sweep Voltammetry (LSV), Staircase Voltammetry (SCV), Tafel Plot (TAFEL), Chronoamperometry (CA), Chronocoulometry (CC), Differential Pulse Voltammetry (DPV) , Normal Pulse Voltammetry (NPV) , Square Wave Voltammetry (SWV), Amperometric i-t Curve (i-t), Differential Pulse Amperometry (DPA), Triple Pulse Amperometry (TPA), Chronopotentiometry (CP), Electrochemical Noise Measurement (ECN), Open Circuit Potential - Time (OCPT)Hydrodynamic Modulation Voltammetry (HMV), Impedance (Niquest, Bode, Mott-shottky, fit-simulation), Impedance - Time (IMPT)

Free lifetime up-gradation of software

Basic electrochemical set-up with all accessories which must include
(a) cell vessel 10-20 ml
(b) vessel lid with facility for mounting electrodes and purge tube (1nos)
(c) glassy carbon electrode : 10
(d) Platinum counter electrode: 4
(e) Ag/AgCl reference electrode: 6
(f) Electrode polishing kit

Computer and printer for data interface
For system control and data acquisition a suitable branded computer having following features: 8 GB RAM with graphic card, Intel Core i5 or better processor, 1 TB HDD; and a HP Laserjet printer should be supplied along with the system.

Technical terms and conditions:

The company should provide free installation of the equipment including detailed demonstration of the same.

Company should provide minimum three years warranty from the date of purchasing the Equipment

Other Terms & Conditions

1. The sealed quotations are to be submitted along with valid Trade License, VAT registration Certificate, Income Tax Return documents and other necessary documents in the office of Prof. Priyabrata Sarkar, Department of Polymer Science and Technology from 11 a.m. to 5 p.m.

2. The quotation should be submitted in a 2-bid system (i.e. Technical and commercial)

2. The last date of submission of quotation is 3weeks from the date of publication. The date of opening of Tender is one week after the last date of submission.

3. The decision of the authority is final. The authority reserves the rights to accept or reject Tender without assigning any reason.

4. The University reserves the right to amend or modify any of the terms and conditions as contend here in and/or to bring forth or incorporate such other terms or further terms and conditions for performance of the job and/or the contract.