



Indian Institute of Technology Kanpur

Samtel Centre for Display Technologies

Enquiry number: SCDT/2013-14/11

Date: September 24, 2013

Sealed Quotations are invited for the supply of PC Controlled Hand held Electrochemistry Teaching kit as per the following specifications:-

Handheld computer controlled bipotentiostat for laboratory training in electrochemistry. It should have following specifications:

Voltage Range	: $\pm 2.000\text{V}$ or better
Voltage Resolution	: 1 mV
Current	: $\pm 200\ \mu\text{A}$ or better
Current Ranges	: 2 nA to 200 μA
Current Resolution	: 0.05% of full scale range. 1 pA on 2nA range
Connection to PC	: mini USB
Power for Potentiostat	: Through mini USB
I/O Lines	: 5 digital I/O control lines, 3 analogue input lines and one analogue output line

Software:

Measurement modes:

- Cyclic Voltammetry
- Linear Sweep Voltammetry
- Differential Pulse Voltammetry
- Square Wave Voltammetry
- Amperometric Detection
- Pulsed Amperometric Detection

System should be supplied with the following:

- Box of screen printed electrodes of Pt, Gold and Carbon each 15 numbers
- Box of Graphene Modified Screen Printed Electrodes 50 numbers
- Dummy Cell to test the Bipot
- Electrochemical cell with holding arrangement and lid with facility for purging
- Cable to connect screen printed electrodes to bipot
- Cable to connect ordinary electrodes to bipot
- Laboratory manual of 10 experiments in basics of electrochemistry such as reduction potential of metals, cyclic voltammetry of reversible, quasi reversible and irreversible redox systems, detection of metals as well as some advance experiments such as measurements on self assembled monolayers and glucose sensors etc. The Laboratory manual should be comprehensive to contain list of instruments, accessories, reagents and chemicals required for each experiment also it should be mentioned. Each experiment should have a neatly written procedure to programme the instrument, perform the experiment and data analysis section describing how to analyze the data generated during experiment. Data analysis should not be automatic so as to facilitate the understanding of the basic principle of experiment. The manual should also contain all necessary theory for student to understand the basic principles of each experiment

Terms and Conditions:

1. Only authorized vendors may quote.
2. Maximum educational discounts should be applied.
3. Validity of quotation should be at least for 60 days.
4. The Rate offered should be free delivery of IIT Kanpur or ex-godown in case of firms situated outside Kanpur. If items are imported then the firms should quote the price on F.O.B basis.
5. Institute is exempted for payment of Excise Duty under notification No. 10/97.
6. Institute is exempted for partial custom duty (CD applicable to IIT Kanpur is 5.15%).
7. Normal payment terms for the Institute will be applicable (90% on delivery of the items and the remaining 10% after satisfactory installation/ inspection).

8. Quotation should carry proper certifications like proprietary certificate, authorization certificate from manufacturer, etc.
9. The delivery period should be specifically stated. Earlier delivery may be preferred.
10. The indenter reserves the right to withhold placement of final order. The right to reject all or any of the quotations and to split up the requirements or relax any or all of the above conditions without assigning any reason is reserved.

Kindly send the quotation in sealed envelope latest by 3:00pm on 26.09.2013 to the following address;

Room No.305,
Samtel Centre for Display Technologies,
Indian Institute of Technology Kanpur-208016, UP, India.