CENTRE FOR NANOSCIENCE & NANOTECHNOLOGY
Block-II, Sector-25, South Campus
PANJAB UNIVERSITY, CHANDIGARH-160014

NCNT/1449

Dated 13.2.15

Dear Sir,

Please quote your lowest rates in duplicate should be clearly written or typed (cutting avoided) for the item/s list attached given below, specifying make, quality, period of supply of each item along with detailed information and should reach the undersigned on or before __23.2.2015__ .

1.   Rates quoted should be FOR Panjab University, Chandigarh.
2.   The rates of insurance, excise duty, S.T. should be clearly mentioned, original receipts for the insurance charges are required along with the bill of supply.
3.   We have been exempted from paying Central Excise Duty, vide Govt. of India notification No.10/97-Central Excise dated March 1, 1997 and is valid upto 31.8.2015.
4.   Special Discount for educational institutions, University teaching department may be mentioned.
5.   The present rate of S.T. applicable on the articles should be clearly mentioned.
6.   The quotation in a sealed envelop **giving our/your reference No./Date of quotation** should be sent after affixing the required postage stamps. The quotation should be sent by POST/BY-HAND (as far as possible).

Thanking you,

Yours faithfully

Coordinator
Nanoscience & Nanotechnology
Centre for Emerging Areas in
Science & Technology
Panjab University Chandigarh

Coordinator, Centre for Nanoscience & Nanotechnology

TECHNICAL SPECIFICATIONS OF ELECTROCHEMICAL WORKSTATION ARE ATTACHED HEREWITH.

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Specifications:

Compliance Voltage: ± 20 V or better at ± 400 mA

Maximum Output Current: ± 400 mA or better at ± 20 V

Output Voltage Range: ± 10 V

Current Ranges smallest current range: ±10 nA to current range 100 mA in eight ranges

Resolution of applied potential: 160 µV

Resolution of measured potential: 4 µV or better

Accuracy of applied current: ±0.2 % of the current range

Measured current resolution: 30 fA on 10 nA full scale range

Potentiostat rise/fall time: 300 ns or lower

Gain bandwidth range of amplifier: 1 MHz

Bandwidth of electrometer: > 4 MHz

Interface: USB interface for connection with PC

Input bias current: < 1pA

Input Impedance of electrometer: > 100 GΩ // 8 pF

Electrochemistry Cell:

It should consist of the following:

50 mL glass cell 1 no, 3mm diameter GC disc working electrode 1 no, Pt wire Counter electrode 1 mm dia 40 mm length 1 no, Ag/AgCl reference electrode (aqueous) and Ag/AgCl reference electrode (non-aqueous) 1 no each

Suitable lid for the cell and purge tube with valve

Screen-printed electrode should be coated total 75 (25 each) for carbon, Au, Pt working electrodes

Electrochemical Software

Software should have facility to record additional signal viz. EQCM, bi-Potentiostat etc. import/export ASCII. Ready to use Vis and generic interface for .Net applications should be included. It should have facility to display up to four plots simultaneously. Comparison with previous experiments should be possible while experiments are in progress. The software should support following basic electrochemical measurements:

Cyclic voltametry with scan rates from 10 µV/sec to 200 V/sec, sampled DC voltametry. Taffel plots, differential Pulse Voltametry, Square-wave Voltametry, electrochemical methods like Chrono-Amperometry, Chrono-Coulometry, and Chrono-Potentiometry

Computer and Printer:

Compatible branded PC, Printer, 2 KVA online UPS one hour back up should be quoted

Warranty two years

OPTIONAL ACCESSORIES:

EIS module

Hardware and Software for EIS measurements in potentiostatic and Galvanostatic control, over a wide frequency range of 10 µHz to 1 MHz. apart from the classical EIS, it should be possible to modulate other outside signals such as rotation speed of rotating disc electrode or the intensity of a light source to perform Electro-hydrodynamic or Photo-modulated impedance spectroscopy. It should be supplied with powerful fit and simulation software for the analysis of impedance data. Frequency range 10 µHz – 30 µHz, Frequency range in 10 µHz – 1 MHz combination with potentiostat galvanostat. Frequency resolution 0.003 %, input range ±10 V, signal types 1 sine, 5 sine, 15 sine, input channels E and I from the potentiostat/galvanostat or X and Y external signals, AC amplitude 0.25 mV to 0.30 Vrms in potentiostatic mode, 0.0002 – 0.3 times current range in galvanostatic mode. Data representation: Nyquist, Bode, Admittance, Dielectric, Mott-Schottky, Data analysis: Fit and Simulation, fine circle, Element subtraction, Kramers-Kronig.

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