

# Indian Institute of Technology Kanpur

## Department of Chemical Engineering

June 28, 2013

**Enquiry Number: CHE/PKB/DST/NC1, dated: 28/06/2013**

**Opening date: June 28<sup>th</sup> 2013 at 4:00 PM:**

**Closing date: July 25<sup>th</sup> 2013 at 5:00 PM**

Sealed quotations are invited for the supply and installation of electrochemical analyzer:

**Sub: Electrochemical analyzer with Potentiostat/ Galvanostat with Windows Based Acquisition Software, Power supply 220V/50Hz, Interface Cable (Serial / USB), Cell cable Manuals & Installation**

Technical specifications for electrochemical analyzer:

- Cyclic Voltammetry (CV)
- Linear Sweep Voltammetry (LSV) with stripping
- Staricase Voltammetry (SCV) with stripping
- Tafel plot (TAFEL)
- Chrono Amperometry (CA)
- Chrono Coulometry (CC)
- Differential Pulse Voltammetry (DPV) with stripping
- Normal Pulse Voltammetry (NPV) with stripping
- Differential Normal pulse Voltammetry (DPNV) with stripping
- Square Wave Voltammetry (SWV) with stripping
- AC Voltammetry (ACV)
- Second Harmonic AC Voltammetry (SHACV)
- Amperometric I-t Curve (I-t)
- Differential Pulse Amperometry (DPA)
- Double Differential Pulse Amperometry (DDPA)
- Triple Pulse Amperometry (TPA)
- Integrated pulse Amperometric Detection (IPAD)
- Bulk Electrolysis with Coulometry (BE)
- Hydrodynamic Modulation Voltammetry (HNV)
- Sweep-Step Functions (SSF)
- Multi-Potential Steps (STEP)
- AC Impedance (IMP)
- Impedance – Time (IMPT)
- Impedance – Potential (IMPE)
- Chronopotentiometry (CP)
- Chronopotentiometry with Current Ramp (CPCR)
- Multi-Current Steps (ISTEP)
- Potentiometric Stripping Analysis (PSA)
- Open Circuit Potential – Time (OCPT)
- Galvanostat
- RDE control (0-10V output)
- Full version of CV simulator
- Impedance Simulator
- IR Compensation
- External Potential Input

- Auxiliary Signal Measurement Channel
- Licensed & Full version software for Corrosion, Impedance, Electrochemistry & all the techniques of CHI760D.
- Software Features:
  - 32-bit Windows-based software
  - Multi-document interface
  - Open, save, delete, list, conversion, and print files
  - Run, macro, iR compensation, filtering, preconditioning, step functions, and cell control
  - Data plot, overlay and parallel plots, Graphics options, color and font selections Smoothing, derivatives, integration, semi-derivative and semi-integral, interpolation, baseline fitting & subtraction,
  - linear baseline correction, data point removing, data point modification, background subtraction, signal averaging,
  - mathematical operation, Fourier spectrum Calibration curve, standard addition, data file report, concentration – time
  - dependence report and plot Digital simulation, user defined
  - mechanisms Data information, data listing, equations, clock, toolbar, status bar Context sensitive help Purge, knock, stir controls for mercury electrode Maximum data length: 128K-8192K selectable.

**Accessories:**

- 2mmPt Working Electrode 3pkg
- 3mm GC Working Electrode 3pkg
- Ag/AgCl Reference (aq) 3pkg
- Ag/AgCl Reference (non aq) 3pkg
- Calomel Reference Electrode
- Pt Wire Counter Electrode
- Electrode Polishing Kit
- Gold Electrode 3pkg
- Ag Electrode 3pkg
- Membrane Conductivity Test Cell – BT 112
- PDC – 32G-2 Basic Plasma cleaner 220V/50Hz
- Compatible Computer with printer

**Terms and conditions:**

- Technical and financial details should be in separate envelope.
- Maximum educational discounts should be applied
- Validity of quotation should be at least for 60 days.
- Price should be on FOR IIT Kanpur & should include the installation and training cost.
- Institute is exempted for payment of Excise Duty under notification No. 10/97.
- Warranty/Guarantee should be clearly mentioned.
- Normal payment terms for the institute will be applicable (90% on delivery of the items and remaining 10% after satisfactory installation/inspection).
- Quotation should carry proper certifications like agency certificate, proprietary certificate, etc.
- The delivery should be specifically stated. Earlier delivery may be preferred.
- 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.

**We would prefer quotes that combine each item and offer a special package.**

Kindly send the quotation (in duplicate) in sealed envelope latest by 25.07.2013 to the following address.

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