Quotations are invited for the Supply of **PC basedElectrochemical Workstation with Impedance analyser** on two bid system (technical and commercial bids)

SPECIFICATIONS FOR PC Based Electrochemical Workstation with Impedance analyser

Instrument must be capable of measuring following techniques

- Cyclic Voltammetry (CV) with simulation/fitting programs
- Linear Sweep Voltammetry (LSV) with stripping
- Bulk Electrolysis with Coulometry (BE)
- Differential Pulse Voltammetry (DPV) with stripping
- Normal Pulse Voltamemtry (NPV) with stripping
- Square Wave-Osteryoung Voltammetry (SWV) with stripping
- Tafel Plot (TAFEL), potentiodynamic deactivation, pitting corrosion, corrosion rate, linear Polarisation, Corrosion current etc.
- Multi-Potential Steps (STEP)
- Multi-Current Steps (ISTEP)
- Amperometrici-t Curve (i-t) – Lifetime testing
- Polarisation I-V curves Linear Sweep
- Open Circuit Potential – Time (OCPT)
- AC Impedance (IMP)
- Impedance – Time (IMPT) (Mott-Scottsky)
- Impedance – Potential (IMPE)
- Impedance Simulator with fitting
- Open Circuit Potential – Time (OCPT)
- Galvanostatic Charge discharge single/multiple cycle -Chrono Potentiometry (CP) with potential limits, polarity by potential or time, no. of cycles etc
- Voltage vs current density curves
- Single or Multi potential steps with charge limits, single or multi current steps, mixed voltage/current control using macro
- I-V measurements, I max, Pmax, Fill factor etc
- Chrono Amperometry (CA)
- Chrono Coulometry (CC)
- AC Voltammetry (ACV) with stripping
- Differential Normal pulse Voltamemtry (DPNV) with stripping
- Second Harmonic AC Voltammetry (SHACV) with stripping
- Differential Pulse Amperometry (DPA)
- Double Differential Pulse Amperometry (DDPA)
- Triple Pulse Amperometry (TPA)
- Integrated Pulse Amperometry Detection (IAPD)
- Hydrodynamic Modulation Voltammetry (HMV)
- Sweep-Step Functions (SSF)
- Chronopotentiometry with Current Ramp (CPCR)
- Potentiometric Stripping Analysis (PSA)
- Staricase Voltammetry (SCV) with stripping
- Auxiliary Signal Measurement Channel
- RDE control (0-10V output)
- IR Compensation
- External Potential Input

Hardware Specifications:

- Potentiostat / Galvanostat, 2- or 3- or 4-electrode configuration
- Maximum potential: ±10V, Maximum current: ± 250 mA & ± 350 mA peak
- Compliance Voltage: >±13V, Potentiostat rise time: 0.6 □s
- Galvanostat applied current range: 3nA – 250mA, Applied current accuracy: 20pA
- Input bias current: < 20 pA,
- CV and LSV scan rate: 0.000001 to 10,000 V/s
- CA and CC pulse width: 0.0001 to 1000 sec
- IMP frequency: 0.00001 to 1MHz (for impedance 10-1000 ohm),
- IMP amplitude: 0.00001V to 0.7V RMS
- Automatic and manual iR compensation, Flash memory for quick software update
- Serial port or USB port selectable for data communication

AC Impedance / Impedance Time / Impedance – Potential Plots

Bode: log Z vs log (freq), Bode : Phase , vs log (freq), Bode : log Z" & Z' vs log (freq)
Bode: log Y vs log (freq), Nyquist ; Z" vs Z', Interactice 3D Plots, Admittance; Y" vs Y'
Warburg: Z" & Z' vs w1/2 w-angular frequency, Z' vs w Z", Z' vs Z"/w, Cot (phase) vs w ½

Accessory:

- Pt Working Electrode – 4 No. ,
- GC Working Electrode – 4 No. ,
- Ag/AgCI Reference (aq) – 4 No.
- Ag/AgCl Reference (non aq) – 4 No. ,
- Calomel Reference Electrode – 4 No.
- Pt Wire Counter Electrode – 4 No.,
- Electrode Polishing Kit & Cell Stand - 4 No.
- Glass Cells-4no.s, Cell Top – 1no.s

Computer:

- Branded Desktop Computer with Latest configuration

Please maintain

- Warranty
- Discount if any

Due date: on or before 10-08-2016

Bid instruction:

Technical bid and financial bid quote have to enclose in separate envelope and separate envelopes need to send in to a single envelope.