



Gauhati University

Department of Chemistry
Gopinath Bardoloi Nagar, Guwahati-781014
Assam::India

NIQ No: GU/Chem/ UGC-BSR Start-up /TKG/2017-1

Date: 30/05/2017
Place: Guwahati

Quotations from the reputed manufacturers/dealers/suppliers are invited for the supply, installation etc. for an **Electrochemical Analyzer / workstation** in the Department of Chemistry, Gauhati University, Guwahati, Assam under UGC-BSR Start-up grant [File No. F.30-386/2017 (BSR)]. **The last date of submitting the quotation to the undersigned is 20/06/2017.**

Tender Specification for Electrochemical Analyzer / workstation

System Specifications:

- 2- or 3 or 4 electrode configuration
- Maximum potential: ± 10 V
- Maximum current: ± 250 mA
- Compliance Voltage: ± 13 V
- Applied potential resolution: 0.0015% of potential range or better
- Applied potential accuracy: ± 1 mV, $\pm 0.01\%$ of scale
- Measured current resolution: 0.0015% of current range or better
- Current measurement accuracy: 0.2% if current range $\geq 1e-6$ A/V, 1% otherwise
- Input bias current: < 20 pA or better
- Scan rate: 0.000001 to 10,000 V/s
- CA and CC pulse width: 0.0001 to 1000 sec

Techniques:

- Cyclic Voltammetry (CV)
- Linear Sweep Voltammetry (LSV)
- Chrono Amperometry (CA)
- Chrono Coulometry (CC)
- Bulk Electrolysis with Coulometry (BE)
- Open Circuit Potential – Time (OCPT)
- Limited version of CV simulator
- IR Compensation
- External Potential Input
- Auxiliary Signal Measurement Channel

Electrodes:

- GC Working Electrode -2 No.
- Ag/AgCl Reference (aq) -1 No.
- Ag/AgCl Reference (Non-aq) -3 No.
- Pt Wire Counter Electrode – 2 No.
- 4 glass cell with Two cell top

Software: Digisim or equivalent Cyclic Voltammetry simulation software. Windows-based software. Ready-to-use Vis & Generic interface for. Net applications should be included.

Computer: Latest version computer compatible with instruments software.

System configuration: I3 Processor, 4GB RAM, 1TB Hard Drive, 19" LED Monitor, DVD Writer, Keyboard & Mouse & speaker

Warranty: 1 year

Service Facility: Supplier should mention their details of service setup and man powers, who are responsible for after sales support. Response time should be within 48 hrs.

Optional:

- There should be a provision that In future the system will use in Photo electrochemistry Setup
- System should be upgradable to Bipotentiostat in future

Gauhati University reserves the right to modify/cancel the requirements.

All terms and conditions will be as per the Gauhati University rules, regulations and decisions.

Principal Investigator:

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