

**DEPARTMENT OF ENGINEERING DESIGN
INDIAN INSTITUTE OF TECHNOLOGY IITMADRAS**

Limited Tender for supply of "ELECTROCHEMICAL WORKSTATION"

Tender No: EDD/RJAG/2017-2018/10/001

Date: 04.10.2017 & Due Date: 23.10.2017, & Time 4.00 pm (Indian Standard Time)

ELECTROCHEMICAL WORKSTATION - (Qty – 1 No)

* Specifications
It should work as Potentiostat, Galvanostat, with Electrochemical Impedance spectroscopy
Compliance Voltage: ± 22 V
Maximum Output Current for maximum compliance voltage claimed: ± 600 mA and above.
Bandwidth : >1 MHz
Slew rate: >10 V/ μ s
Input Impedance of electrometer : $>10^{13}$ ohms
Capacitance: <10 pF
Applied voltage range: ± 10 V accuracy ± 0.2 %
IR COMPENSATION
Positive Feedback, current interrupt
Range: 2000 MOhm to 2 ohm depending on current range
CURRENT MEASUREMENT
Ranges: ± 75 pA to 2 A, Current resolution: 2.5 fA approx. or better
Frequency Response:
2 mA Range: 3 dB at >1 MHz, compliant with the source impedance
20 μ A Range: 3 dB at >75 kHz, compliant with the source impedance
POTENTIAL/CURRENT CONTROL
Digital/Analog Converters (DACs)
Resolution: 16 bits, Range: ± 10 V (potentiostat), ± 100 % of fullscale current (galvanostat)
SYSTEM Rise Time: 250 ns
POWER SUPPLY: ~ 240 V, 50 Hz
Corrosion Measurement Software- Windows XP compatible
Electrochemical Impedance Software- Windows XP compatible
Softwares should enable- Tafel plot, anodic and linear and cyclic polarization, potentiostatic and galvanostatic and galvanodynamic plots, Galvanic corrosion studies, Chronoamperometry, Chronopotentiometry, Cyclic, cyclic & square wave, and square wave voltammetry, normal, reverse normal, & differential pulse voltammetry, linear scan, staircase cyclic & ramp cyclic voltammetry, Electrochemical impedance spectroscopy, Recurrent potential pulsing, recurrent galvanic pulsing, windows compatible data and graphics ability.
Rotating Electrode (RRDE/RRDE/RCE) with accessories suitable for erosion-corrosion tests of coatings.
Optional : Electrochemical Cell Kit including Platinum counter electrode, Ag/AgCl reference electrode, calomel reference electrode, Corrosion flat cell
Complete installation of all hardware and software with successful demonstration of equipment at user's site.
Warranty: The whole set-up (incl. all hardware and software) should be guaranteed to work satisfactorily for a period of two years from the date of successful installation.


PROJECT CO-ORDINATOR
 Department of Engineering Design
 Indian Institute of Technology Madras
 Chennai - 600 036.

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Dear Sir/ Madam,

1. Quotations are invited in duplicated for the various item shown below over leaf/enclosed list.
2. The quotations are to be two parts – **One Technical and Commercial offer:** The two parts of the offer are to be clearly marked on the envelopes. The two parts of the offer in separate envelopes must be enclosed in the bigger envelope duly sealed and super scribed with reference number and date and due date must be addressed to the under signed so as to reach him on or before the due date stipulated above.
3. The quotations should be valid for (60) sixty days from the due date and period of delivery required should be clearly indicated.
4. If the item is under DGS&D Rate contract No. and the price must be mentioned. It may also please be indicated whether the supply can be made direct to us at the Rate contract price .If so please send copy of the RC. (Please note that we are not Direct Demanding Officers).
5. Relevant Literature pertaining to the items quoted with full specifications. (and drawings if any) should be sent along with quotations, wherever applicable. Samples if called should be submitted free of charges and collected back at the supplier's expenses.
6. **Local firms:** Quotations should be for free delivery to this Institute. If quotations are for Ex – Godown delivery charges be indicated separately.
7. **Firms outside Chennai:** Quotations should be for F.O.R Chennai / F.O.B. Chennai / CIF Chennai (Including Insurance and Freight Charges). If Ex-Works, Packing, forwarding and freight charges must be indicated.
8. The rate of GST and the percentage of such taxes legally leviable and intended to be claimed should be distinctly shown along with price quoted. If this is not indicated no such claim will be admitted at any stage.
9. IIT Madras is exempt from IGST and import and is eligible for concessional rate of customs duty. Necessary certificate will be issued on demand.
10. Goods should be **supplied by carriage paid and insured.**
11. Goods shall not be supplied **without an official supply order.**
12. **Payment:** Every short effort will be made to make payment within 30 days from the date of bill/acceptance of goods whichever is later.
13. The Guarantee period of the item may be indicated clearly.
14. **Acceptance and Rejection:-** IITM has the right to accept the whole or any part of the Tender or portion of the quantity offered or reject it in full without assigning any reason.
15. **The limited tender was posted in our institute web site also. (tender@iitm.ac.in) and also up loaded in CPP Portal.**
16. Any quotations received after the deadline prescribed above will not be accepted. The quotation (duly signed hard-copy) should be sent to the following address.

Dr.R.Jayaganthan
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04422575630


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