

GOVERNMENT OF INDIA
DEPARTMENT OF ATOMIC ENERGY
DIRECTORATE OF PURCHASE & STORES

Separate item wise sealed tenders are invited from the reputed manufacturers/dealers registered with DPS/DGS&D/NSIC or any other Central Government Department, BY THE REGIONAL DIRECTOR, MADRAS REGIONAL PURCHASE UNIT, DIRECTORATE OF PURCHASE AND STORES, DEPARTMENT OF ATOMIC ENERGY, VI FLOOR, SHASTRI BHAVAN, 4 HADDOWS ROAD, CHENNAI- 600 006, for the supply at Central Stores, HWP, Tuticorin/Indira Gandhi Centre for Atomic Research, Kalpakkam-603102, as detailed below.

TENDER NO	COST OF TENDER (INCLUDING TAX)	LAST DATE FOR SALE OF TENDER SET	LAST DATE FOR RECEIPT OF TENDER (1300 HRS)	DATE OF OPENING OF TENDER (1100 HRS)	EMD (INR)	SPECIFICATION AND QUANTITY
DPS/ MRPU/ WSCL/ CAP/ 4684/ PT-705	156	19/11/08	04/12/08	05/12/08	50000	I. Installation and commissioning of Computer controlled Electrochemical work Station for Trace Metal Analysis having the following items. - Potentiostat / Galvanostat and Frequency response Analyser - Trace metal analysis facility: Stand and cell with electrodes - Software and Computer to control Electrochemical techniques with a printer - Electrochemical cell Accessories (Detailed specification and quantity are given in the tender document which can be purchased from Deputy Controller of Accounts, Madras Regional Accounts Unit, Department of Atomic Energy, VI Floor, Shastri Bhavan, 4 Haddows Road, Chennai 600 006 by paying the cost of the tender)

The Documents priced as above can be obtained in person from the above address between 10.00 a.m. And 1.00 p.m. on all working days on submission of a written request in the firm's letter head along with an account payee DEMAND DRAFT or Banker's cheque drawn in favor of Deputy Controller of Accounts, Madras Regional Accounts Unit (no MO, cash or postal order acceptable), payable at Chennai. Wherever the tender documents are required to be sent by Post at Vendor's risk, a written request for the same along with an Account Payee Demand Draft towards the tender fee, shall be sent to the Deputy Controller of Accounts, Madras Regional Accounts Unit at the above address indicating the details of the tender No., Name and address of the firm on whose favor the tender documents are to be issued. It must be ensured that such request should be sent in advance to reach this Directorate at least 10 days prior to the last date for sale of tender.

The envelope should be super scribed with the wordings "Request for issue of tender document against Tender No._____".

The tenderer shall submit along with the tender, Earnest Money Deposit (EMD) as mentioned above in the form of Demand Draft or Banker's Cheque from any Nationalized / Scheduled Banks drawn in favor of Deputy Controller of Accounts, Madras Regional Accounts Unit, Chennai. Any offer not accompanied with the EMD shall be rejected summarily as non-responsive. The EMD of the unsuccessful bidders shall be returned within 30 days of the end of the bid validity period. The same shall be forfeited if the tenderers withdraw their offer after the tender opening during the bid validity period. The Government shall not be liable for payment of any interest on EMD or any depreciation thereof.

However, those who have valid registration with DGS&D, NSIC or DPS as on the date of submission of bids are exempted from payment of EMD.

Brief information about our public tender is also available at <http://www.igcar.gov.in/tenders> and <http://tenders.gov.in/departments.asp?id=256>.

For terms and conditions please visit <http://www.dpsdae.gov.in>

REGIONAL DIRECTOR, MADRAS REGIONAL PURCHASE UNIT HAS THE RIGHT TO REJECT ANY OFFER IN PART OR IN FULL WITHOUT ASSIGNING ANY REASON.

REGIONAL DIRECTOR

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TECHNICAL SPECIFICATIONS

Annexure – A

II. Installation and commissioning of Computer controlled Electrochemical work Station for Trace Metal Analysis having the following items.

1. Potentiostat / Galvanostat and Frequency response Analyser
2. Trace metal analysis facility: Stand and cell with electrodes
3. Software and Computer to control Electrochemical techniques a with printer
4. Electrochemical cell Accessories

III. Detailed Specifications:

1. (a) Potentiostat / Galvanostat

Max. Compliance voltage	± 30 V or more
Current	± 2 A or more
Voltage range	± 10 V or more
Gain Band width	1 MHz or more
Input impedance	>1 T Ω in parallel < 10 pF
Input Bias Current	< 1 pA
Current Ranges	100 nA to 1 A in several ranges
Resolution at nA range	30 fA
System rise time	< 250 nSec
Potential Resolution	30 μ Volts
Variable scan rate	200 V/s
D/A converter	16 bit multi channel
Interface	USB/RS232 or other interface for PC

(b) Frequency Response Analyser

Frequency range:	10 μ Hz to 1 MHz
AC amplitude	0.2 mV to 0.35 V rms in Potentiostatic Mode
mode	0.0002 - 0.35 times current range in Galvanostatic mode

The system should be capable of performing following electrochemical techniques: Cyclic Voltammetry, Linear sweep Voltammetry (LSV), Sampled DC Voltammetry, Differential pulse and normal pulse Voltammetry, Square Wave Voltammetry, AC Voltammetry, Potentiometric Stripping Analysis, Chrono techniques and Impedance spectroscopy

2. Trace Element Analysis Facility: Stand and cell with electrodes

(a) The voltammetry stand should have a provision for multimode electrode operation (Dropping Mercury Electrode DME / Hanging Mercury Drop Electrode HMDE) with a mercury reservoir. The unit should provide choice of mercury drop size. The following functions viz. stirrer ON/OFF, gas purging, fresh drop formation should all be controlled by the software.

(b) The electrochemical cell should have a volume of 10-50 ml and should be supplied with one no. each of Pt rod counter electrode and Ag/AgCl reference electrode and 10 nos. of spare electrode capillaries for multimode electrode operation.

(c) The system should have rotating disk electrode (RDE) operation with a Speed Range of 0-3000 rpm to perform hydrodynamic studies. The RDE tips of Au and Pt (one each) of 2 mm diameter should be provided with the system.

3. Software and Computer to control Electrochemical techniques a with printer

Software: The electrochemical software should be Windows- based with the following features: Kinetic and wave analysis for polarographic techniques, peak search, base line correction, fit and simulation options, convolution / de-convolution, a variety of smoothing functions (FFT and Weighted moving average) for CV techniques, Transient time analysis for chrono techniques, different plotting formats, equivalent circuit modeling, fit and simulation procedures and Kramer-Kronig test for Impedance data analysis

Computer & Printer: Intel Pentium Core 2 Duo 3.0 GHz based system with following minimum specifications: 2GB DDR 2 RAM, 20 X Dual layer DVD writer, 300 GB SATA HDD, 17" LCD TFT Monitor, Optical Mouse, MM Keyboard and a HP Laser Jet 1020 equivalent printer.

4. Electrochemical cell Accessories:

Cell vessel (20-50 ml)	1 no.
Vessel lid with facility for mounting electrodes & purge tube	1 no.
Ag/AgCl Ref Electrode	1 no.
Glassy Carbon Counter Electrode	1 no.
Pt disc working Electrode 2 mm dia.	1 no.

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