

NATIONAL INSTITUTE OF TECHNOLOGY
KURUKSHETRA-136119

No. SCH/19/28 / 4059

Dated: 17/07/19

M/s Institute Website

Sub: INVITATION OF QUOTATIONS FOR ELECTROCHEMICAL WORKSTATION.

1. You are invited to submit your most competitive quotation for the following goods:

Sr. No.	Brief Description & Specifications of Goods	Quantity
1.	Electrochemical Workstation (Detailed Specifications are attached)	01 No.

- Necessary literature of the goods may please be sent to facilitate to take decision.
- Payment will be made Online through RTGS/NEFT within 30 days after receipt of material in good condition and according to specifications and installation of the same. The Bank detail for making online payment may be indicated in the quotation.
- The supplier shall deposit Earnest Money along with the Quotation amounting to Rs. 25000 /- in shape of Accounts Payee Demand Draft/Fixed Deposit Receipt/Bankers Cheque or Bank Guarantee from any scheduled commercial Bank in favour of the Director, National Institute of Technology, Kurukshetra. The Quotations without Earnest Money shall be rejected, the EMD will remain valid for a period of 45 days beyond the final validity period of quotation.
- Performance Security @ 5% of the total value of the equipment must be furnished in shape of Demand Draft/Fixed Deposit Receipt or Bank Guarantee from any scheduled Commercial Bank in favour of the Director, NIT Kurukshetra valid up to 60 days after the date of completion of warranty by the successful bidder.
- The items must be supplied within delivery period or delivery period extended by the Institute on the request of the supplier on genuine grounds otherwise the penalty for delayed period @ 0.5% of the amount shall be charged for every week or part thereof and the maximum 10%. The request for extension of delivery period (if any) must be made before the last date of supply as per P.O.
- Vide Notification No.45/2017-Union Territory Tax (Rate) and 47/2017- Integrated Tax Rate dated 14.11.2017 issued by the GoI Ministry of Finance, Department of Revenue towards exemption of GST, NIT Kurukshetra is eligible to get concessional GST (i.e. 5% in all cases) for the items which are supposed to be used in research activities of the Institute.
- The goods are required exclusively for Research Purpose.
- The quotation should remain valid for a period not less than 90 days from the date of submission.
- The firm must have got GST No. printed on their quotation.
- The right of accepting or rejecting any quotation and to cancel the bidding process and reject all quotations without assigning any reason is reserved with the Institute.
- The supplier must attach copies of two latest purchase order (preferably from IITs/NITs) indicating the price for the equipment.
- The due date for receipt of quotation is 08.08.2019 and will be opened on next working day at 10:00 AM. Please quote on the top of the envelope our Ref. No. and due date of opening.

Suneel
17.07.19
Prof-Incharge (Stores)

Technical Specifications for Electrochemical Workstation

Electrochemical Workstation to measure the following experiments: Cyclic Voltammetry (CV), Linear Sweep Voltammetry (LSV), Chrono Amperometry (CA), Chronocoulometry (CC), Bulk Electrolysis with Coulometer (BE), Rotating Disk Electrode (RDE), Rotating Ring- Disk Electrode (RRDE), Koutecky-Levich Series (KL-RDE), Auxiliary signal measurement channel, Oxygen-Evolution Reaction (OER), Oxygen Reduction Reaction (ORR), Hydrogen Evolution Reaction (HER) along with any related experiments.

Potentiostat

- 2- or 3- or 4-electrode configuration
- Maximum potential: ± 10 V (in various range)
- Maximum current: ± 250 mA
- Potentiostat rise time: < 1 μ s, 0.8 μ s typical
- Applied potential resolution: 0.0015% of potential range
- Applied potential accuracy: ± 2 mV, $\pm 0.01\%$ of scale
- Measured current range: ± 10 pA to ± 0.25 A in 12 ranges
- Current measurement accuracy: 0.2% if current range $\geq 1e-6$ A/V, 1% otherwise

Galvanostat

- Galvanostat applied current range: 3 nA - 250 mA
- Applied current accuracy: 10 pA $\pm 0.2\%$ if $> 3e-7$ A, $\pm 1\%$ otherwise
- Applied current resolution: 0.03% of applied current range
- Measured potential resolution: 0.0015% of measured range

RRDE set up:

- System should be supplied with a Rotating Ring Disk Electrode (RRDE) Setup with bipotentiostat (capable of controlling a four electrode system) and RRDE Rotator, controller, electrode cable. Compatible RRDE tips of Platinum.
- Motor speed range: 100 - 2000 rpm or above
- Maximum current : 250 mA
- RRDE Pt Ring and GC Disk Electrode (1 no.)

Accessories items:

- Electrochemical Cell System (4 glass cells with one Teflon cell top), 1 no
- N₂-Purging tube
- Pt Working Electrode 1/pkg
- Glassy carbon Working Electrode 1/pkg
- Ag/AgCl Reference (aq) 1/pkg
- Ag/AgCl Reference (non aq) 1/pkg
- Hg/HgO Reference 1/pkg
- Calomel Reference Electrode 1 no
- Pt Wire Counter Electrode 1 no.
- Reversible hydrogen electrode (1 no.) and Electrode Polishing Kit
- Any related equipment for above mentioned experiments
- Desktop Computer and printer with latest configuration

Warranty: 1 year; FOR: NIT Kurukshetra.