



Indian Institute of Technology Madras

I.I.T.P.O., MADRAS-600 036

DEPARTMENT OF CIVIL ENGINEERING

O/C

SPEED POST

Form for Inviting Quotations

Ref.No. CIE/2018/LIGY/Electrochemical Workstation with Impedance Analyzer Date: 20/07 /2018

DUE DATE: 31.07.2018

To


Dear Sir/Madam,

Quotations are invited for the supply of an "Electrochemical Workstation with Impedance Analyzer " conforming to the specifications given in the enclosed list.

1. The quotation should be submitted under the two-bid system (i.e.) Technical Bid and Financial Bid in separate envelopes. Both the independent covers should be placed in one big cover and sealed and superscribed on the envelope with the reference No. and due date, should be addressed to the **undersigned so as to reach on or before the due date stipulated above.**
2. The Quotations should be valid for (60) **Sixty days from the due date and the period of delivery** required should also be clearly indicated.
3. 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 (Please note that we are not Direct Demanding Officers). If so please send copy of the RC.
4. Relevant literature pertaining to the items quoted with full specifications (and drawing, if any) should be sent along with the Quotations, wherever applicable. Samples if called for, should be submitted free of charges, and collected back at the supplier's expenses.
5. Local Firms : Quotations should be for free delivery to this Institute. If Quotations for Ex-Godown delivery charges should be indicated separately.
6. Firms Outside Madras : Quotations should be for F.O.R. Madras. If F.O.R. consignor station, freight charges by passenger train / lorry transport must be indicated. If Ex-Godown, packing, forwarding and freight charges must be indicated.
7. The rates of GST and other taxes legally leviable and intended to be claimed should be distinctly shown along with the price quoted. Where this is not done, no claim for GST/General Taxes will be admitted at any stage and on any ground whatsoever. IIT Madras is eligible for concessional GST. Relevant certificate will be issued. In case of import supply the price should be quoted without custom duty. I.I.T. Madras is exempted from levy of IGST on Imports and eligible for concessional custom duty (not exceeding 5%) and the price should be quoted on **EX-WORXS** and **CIP** basis indicating the mode of shipment.
8. Goods should be supplied carriage paid and insured.
9. Goods shall not be supplied without an official supply order.
10. Payment : Every attempt will be made to make payment within 30 days from the date of receipt of bill / acceptance of goods, whichever is later

Details as per enclosed list.

Yours faithfully


(Prof. Ligy Philip)

- Note: (i) Quotation should be sent by SPEED POST only or to be delivered directly concerned
(ii) Firms are requested to submit the specifications of their product along with supporting technical Documentation/brochure instead of

Technical Specification for Electrochemical workstation with Impedance Analyzer

System should be designed and manufactured under ISO-9001 and should comply with international regulatory, safety requirement. The Electrochemical workstation with Impedance Analyzer data system should be based on Microsoft Windows operating system for instrument control, data acquisition and data analysis

SL.NO	Specifications	Descriptions
1	Operating Principle	Potentiostatic/Galvanostatic and FRA Mode
2	Current measurement range	$\pm 100\text{pA}$ - $\pm 1\text{A}$
3	Current Measurement accuracy	0.1% of the range
4	Compliance voltage	$\pm 12\text{V}$
5	Applied Potential	$\pm 10\text{V}$
6	Bandwidth	8MHz
7	Impedance Frequency range	10 μHz -7MHz
8	AC Amplitude	0.5mV to 2.5V
9	Voltage Resolution	1 μV
10	Data Acquisition rate	1000,000 samples/s
	Software Requirements	
1	Voltammetry software	CV, Multiple CV, SWV, Staircase Voltammetry
2	Pulse Software	DPV, Normal Pulse, RNPV, Chrono amperometry , Chronopotentiometry
3	Corrosion Software	Potentiostatic/Gavanostatic-Gavanodynamic, LPR, Tafel, ECN, CPT
4	Impedance Spectroscopy software	Potentiostatic/Galvanostatic EIS with single sine, Multisine techniques.
5	Battery/Supercapacitor testing software	charge/discharge Constant potential, Constant current, Constant power, Constant resistance/load, Calculation efficiency of cycle
6	Fuel cell/Photovoltaic software	Constant load discharge, I-V Measurement
7	EIS Fitting software	<ul style="list-style-type: none"> EIS circuit fitting facility and software should capable of include our own

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		design
8	Accessories	Electrochemical cell with Platinum counter Electrode, Glassy carbon working Electrode, AgAgcl reference Electrode.
9	Data Acquisition system	<ol style="list-style-type: none"> 1. The system must be provided with a set of installation, operating and troubleshooting manuals both in paper and software forms. 2. A suitable PC compatible for the above instrument control should be supplied along with the instruments. The PC should meet the minimum requirements such as desktop with i-5 Processor, 4 GB RAM, HD 500 GB or more, Windows 7 home basic or better and 21" or more LED monitor. 3. Standard curves to be created and stored in PC.
10	Warranty	<ol style="list-style-type: none"> 4. Minimum 2 years warranty with 1 2 year free service will be preferred 5. A service center must be available in Chennai for service engineers to attend to the instrument for maintenance or troubleshooting. 6. On-site training for the operation of the hardware and software systems should be included.

Angy Philip