P G DEPARTMENT OF ELECTRONICS UNIVERSITY OF JAMMU, JAMMU

NO.: PGD/ELE/873 DATED: 14-01-2021

NOTICE INVITING TENDERS FOR THE PURCHASE OF IMPEDANCE SPECTROSCOPY SET UP

Offers (rates, terms, detailed literature, and specifications) are invited from manufacturers/authorized distributors/dealers, etc., for supply of the following instrument having the required specifications or better:

TECHNICAL SPECIFICATIONS FOR IMPEDANCE SPECTROSCOPY SET UP

Impedance spectroscopy set up having Potentiostat /Galvanostat with EIS capability should be interfaced with PC and fully controlled by software. Equipment should have all the connectors/electrodes and should have the following specifications:

	TECHNICAL SPECIFICATIONS	
1		Trib Day Map
1.	Power	Li-ion Battery or USB
2.	PC interface:	Bluetooth® / USB
3.	Operating modes:	Potentiostat / Galvanostat
4.	DC-Potential range:	± 4 V or Better
5.	Current ranges (potentiostat)	±1 nA to ±10 mA (8 ranges minimum) or better
6.	Maximum measurable current	± 40 mA or better
7.	Potential ranges (galvanostat)	± 100 mV, ± 1 V (2 ranges)
8.	Applied Potential Resolution	1 mV or better
9.	Measured Current Resolution	0.025% of current range or better (Minimum 1 pA on lowest current range)
10.	Applied Current Resolution	0.1% of current output range or better

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11.	Measured Potential	0.012% of potential range or better
	Resolution	
12.	Potential Accuracy	± 0.2 % or better
13.	Current Accuracy	≤ 0.5 % of current range at 100 nA to 10 mA or better
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EIS Hardware: Equipment should be capable of In-situ EIS Measurements with an Advanced Fit and Simulation Software and should have following specifications:

- **Frequency range:** 1 mHz to 1 MHz
- **Contour Plot accuracy** of 1°, 1% from 1mHz to 100 kHz and 10°, 10% from 100 kHz to 1MHz.
- **AC Amplitude range:** 1 mV to 0.350 V rms (1.0 V p-p)
- AC perturbation superpose to a fixed DC Voltage [-3.5 V to 3.5 V] or OCP value
- Frequency scan

EIS Software should be capable of

Data presentation in Nyquist, Bode, Lissajous, Time Domain, Frequency Domain (FFT) and more

- Fit and Simulation Video Replay
- Graphical Equivalent Circuit
- NOVA 2.0 Fit and Simulation, semicircle fit
- Export measured data to ZView, EIS Analyzer or NOVA with Single click.

Software Features:

The supplied software should have following features:

- 3D plotting and Video replay capability, Manual control of the experiment for tailoring electrochemical measurements, Plot overlay, peak integration, smoothing, subtraction, derivative curve, baseline fitting, etc
- Script editor for programming specific work routines
- Peripheral configuration (digital inputs/outputs) for synchronized operation with other devices

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Terms and Conditions:

- 1. Tenders addressed to, "Head, Department of ELECTRONICS, Baba Saheb Ambdekar Road, New University Campus, University of Jammu, Jammu 180 006", should be submitted online only (https://www.jktenders.gov.in).
- 2. Delivery of goods should be FOR Department of ELECTRONICS, University of Jammu, Jammu.
- 3. General Sale tax/custom duty/excise/entry tax or any other tax, if any, should be clearly mentioned. Rates should be inclusive of custom clearance, insurance etc. It may kindly be noted that University of Jammu will not bear any cost/expenditure arising out of loss during transportation, etc. Cost of equipment should include transportation charges and insurance charges upto FOR destination. University of Jammu is exempted from Custom Duty under DSIR registration. DSIR certificate shall be provided by the University of Jammu.
- 4. Firm shall be required to submit complete information/brochure/catalogue along with the offer.
- 5. Firm should submit an authorization certificate from principal firm for sale and service.
- 6. Concession to educational institutions, if any, should be clearly mentioned.
- 7. Products confirming to particular standards (ISO, ISI etc.) should be clearly mentioned.
- 8. In case any item is your proprietary product or if you are sole manufacturer/distributor of requisite item, a certificate to this effect should be enclosed.
- 9. It is at discretion of the competent authority to reject one/all tenders/part of tender without assigning any reason, thereof.
- 10. In case seller fails to complete in full, all deliveries of product in accordance with supply order; the seller shall be responsible for the liquidity damages. Thereafter, the buyer will have right to terminate supply order in the case of such delay beyond period mentioned by seller in the offer and buyer will have total discretion to buy product from the market/other supplier at the lowest rate.
- 11. An undertaking should be submitted by your concern that rates quoted in this offer are lowest/at par with rates quoted to other Govt./Semi-Govt. institutions in the country and your concern/firm has not sold this product to any other organization in India at the price lower than the price quoted in this offer.
- 12. A user list of the institutions/organizations where the quoted equipment has been installed and working successfully must be provided.
- 13. Debarment of the bidding firms shall be governed by Rule No. 151 of GFR 2017; Ministry of Finance, GOI, as mentioned below:
 - (i) A bidder shall be debarred if he has been convicted of an offence—
 - (a) under the Prevention of Corruption Act, 1988; or

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- (b) the Indian Penal Code or any other law for the time being in force, for causing any loss of life or property or causing a threat to public health as part of execution of a public procurement contract.
- (ii) A bidder debarred under sub-section (i) or any successor of the bidder shall not be eligible to participate in a procurement process of any procuring entity for a period not exceeding three years commencing from the date of debarment. Department of Commerce (DGS&D) will maintain such list which will also be displayed on the website of DGS&D as well as Central Public Procurement Portal.
- (iii) A procuring entity may debar a bidder or any of its successors, from participating in any procurement process undertaken by it, for a period not exceeding two years, if it determines that the bidder has breached the code of integrity. The Ministry/Department will maintain such list which will also be displayed on their website.
- (iv) The bidder shall not be debarred unless such bidder has been given a reasonable opportunity to represent against such debarment.
- 14. All the pages of soft copy of the offer should be endorsed along with the stamp/seal of the firm.
- 15. It may kindly be noted that in case a firm quotes NIL charges/consideration, the bid shall be treated as unresponsive and will not be considered.
- 16. Firm shall be required to submit the EMD/Bid security amounting to Rs. 25000/- in the form of bank guarantee/DD/CDR from any of the commercial banks which should remain valid for the period of forty-five (45) days beyond the final date of validity period.
- 17. Firms which are exempted to submit the EMD/Bid security shall be required to submit certificate issued by the concerned Ministry/Department.
- 18. Successful bidders shall be required to submit performance security amounting to 10% of the quoted price pledged to the **Head, Department of Electronics, University of Jammu, Jammu** in the form of bank guarantee from any of the commercial banks which should remain valid for sixty (60) days beyond the date of completion of all contractual obligations of the suppliers including warranty obligations.
- 19. Financial bids of only technically qualified tenderers shall be opened. If the Technical Bids are not in order or are deficient in some respect, the commercial bids in respect of such tenders shall not be opened.
- 20. Item must be quoted along with the warranty as specified in technical specifications.