



CENTRE FOR NANO AND SOFT MATTER SCIENCES

Arkavathi, Survey No.7, Shivanapura, Dasanapura Hobli,
Bengaluru – 562162

Autonomous Institution under the Dept. of Science & Technology, Govt. of India

Procurement of Electrochemical Workstation with Impedance Analyzer

RFQ Reference No.	CeNS/2026-27/Proc/RFQ/_____
Date of Issue	29.10.2026
Start Date of Bid	29.10.2026
Last date and time for submission	09.11.2026
End Date of Bid	09.11.2026 4:00 PM

1.) The Centre for Nano and Soft Matter Sciences (CeNS), Bengaluru, invites sealed quotations from eligible suppliers/manufacturers or their authorised representatives for the supply of one (1) Electrochemical Workstation with Impedance Analyzer, including the accessories, software, and laptop described in this RFQ. The quotation shall be submitted in accordance with the requirements and terms specified herein.

Bidders shall submit complete technical details, the manufacturer's datasheet/technical literature, commercial quotation, delivery period, warranty commitment, and the duly completed Purchase Compliance Statement (Annexure I). Any deviation from the required specifications shall be clearly identified and explained. Blank mandatory compliance fields may be treated as incomplete.

2.) The offered equipment shall meet the following requirements. Full details and the bidder's compliance shall be provided in Annexure I.

A. General Specifications:

Parameter	Required specification
Channels per unit	1 channel per unit
Operating modes	Pot / Gal / ZRA / FRA
Cell connections	2, 3, 4 or 5 electrode connections
ADC/DAC resolution	16 bit
Slew rate (no load)	5 MV/s
Maximum sampling speed	100,000 samples/s
Floating / earth-grounding	Both; switchable
Input impedance	> 10 TΩ
Input bias current	< 1 pA
Onboard data backup memory	16 GB
Physical dimensions	24 × 17 × 6 cm
Channel cable length	100 cm
Computer interface	1 USB per unit
Power supply	100–240 VAC, 50–60 Hz

B. Potentiostatic Input / Output:

Parameter	Required specification
Compliance voltage	± 12 V per channel
Controlled-voltage scan ranges	4 ranges: ± 10 V, ± 5 V, ± 1 V, ± 0.5 V
Applied potential accuracy	0.1% of set point; 1 mV minimum
Applied potential resolution	0.003% of range; 15 μ V minimum
Measured potential accuracy	0.1% of measurement; 1 mV minimum
Measured potential resolution	0.003% of range; 15 μ V minimum

C. Galvanostatic Input / Output

Parameter	Required specification
Maximum current	± 1 A
Current ranges	8 ranges, 100 nA to 1 A
Applied current accuracy	0.1% of range; 1 nA minimum
Applied current resolution	0.003% of range; 3 pA minimum
Measured current accuracy	0.1% of range; 1 nA minimum
Measured current resolution	0.003% of range; 3 pA minimum

D. Impedance Analyzer

Parameter	Required specification
AC frequency range for EIS	10 μ Hz to 2 MHz
AC frequency accuracy	0.005% or better
AC frequency resolution	0.0004%; 3 μ Hz maximum (as stated in the specification)
Potentiostatic amplitude	$\leq 100\%$ of range; 10 V maximum
Potentiostatic amplitude resolution	240 μ V; 12-bit resolution
Galvanostatic amplitude	$\leq 100\%$ of range; 1 A maximum
Galvanostatic amplitude resolution	0.002% of range; 2.4 pA maximum (as stated in the specification)

E. Software, Functions and Applications

Parameter	Required specification
Applications	Cyclic voltammetry; chronoamperometry; chronopotentiometry; pulse voltammetry (DPV, LSV, NPV, SWV, SV); OCP; constant power/resistance; single-frequency; Mott-Schottky; PITT; RDE; RRDE; battery capacity; CC-CV charge/discharge; constant-load/power discharge; EIS
Multichannel expansion	Multiple units shall connect to the same computer to form a multichannel system
Onboard data backup	16 GB memory backs up experimental data for recovery
Real-time adjustment	Voltage/current set points, OCP mode and sampling rates adjustable in real time
Experiment design	Prebuilt experiments and drag-and-drop custom experiment builder; no coding required
I-V measurement software	Licensed full version for I-V, I _{max} , P _{max} and fill-factor measurements; upgrades as required; compatible with the latest Windows OS
Operating environment	Optimum operating temperature 25 °C; air-conditioned room preferable
Software/support	User interface software and unlimited remote technical support included

F. Additional Mandatory Requirements

Parameter	Required specification
Multichannel dummy cell	8-channel dummy cell for external cell calibration, with EMI shielding and GND option
Spectro-electrochemistry interface	Interface available for spectro-electrochemistry analysis
Floating / ground option	Instrument must provide floating / GND option
Multichannel software and waveforms	Software supports multiple channels with multichannel add-on and custom experiment design using multiple voltage/current waveforms

G. Warranty

Parameter	Required specification
Warranty period	Minimum 2 years

H. Accessories and Consumables

Parameter	Required specification
Ag/AgCl reference electrode	1 quantity; removable Teflon holder; 3 M KCl filling electrolyte; 6 mm tube with O-ring; high-quality frit
Platinum mesh electrode with Teflon holder	1 quantity; 10 × 10 mm; 90.0% Pt mesh purity; mounted at Teflon end; Pt foil size 10 × 10 mm; mesh with wire total size 30 mm; 6 mm Teflon shaft with O-ring; gold-coated copper connecting rod
Glassy carbon electrode	1 quantity; 3 mm diameter cylindrical casing; PTFE casing; mirror-finish surface; gold-coated connecting rod
Mini electrode polishing kit	1 kit: 1.0 µm alpha alumina (~5 g); 0.3 µm alpha alumina (~5 g); 0.05 µm gamma alumina (~12 g); four 60 mm 1200-grit disks; four 60 mm microcloth polishing pads; one 70 mm support disc
Gastight cell	1 quantity; 30 mL; borosilicate and Teflon; lid hole 6 mm; maximum temperature 100 °C; supplied with stand

I. Laptop

Parameter	Required specification
Laptop supplied	1 quantity; Dell 15 Smartchoice; Intel 13th Gen Core i5-1334U; 16 GB RAM; 1 TB SSD; FHD 15.6 in (39.62 cm); Windows 11; MS Office 2024; Silver

4. Commercial and General Conditions

Condition	Requirement
Quotation validity	The bidder shall state the validity period of the quotation.
Price schedule	Quote the basic price, applicable taxes/GST, freight, insurance, installation/commissioning (if applicable), training, and any other charges separately. Clearly state the total landed cost payable by CeNS.
Delivery period	The bidder shall specify the delivery period from the date of receipt of the Purchase Order.
Warranty and support	Minimum two-year warranty is required. State warranty coverage, service arrangements, response time, and support contact details.
Installation and demonstration	State whether installation, commissioning, user training and demonstration are included in the quoted price.

Documentation	Provide manufacturer's datasheets, technical literature, product make/model, country of origin, and authorisation letter where applicable.
Compliance statement	Submit Annexure I completed in full. Mark each requirement Comply / Not Comply / Deviation and describe every deviation with supporting technical literature.
Taxes and duties	Clearly indicate all applicable taxes, duties and statutory charges.
Payment terms	The bidder shall clearly specify its proposed payment terms. Final payment terms shall be as stated in the Purchase Order issued by CeNS.
Right of acceptance	CeNS reserves the right to accept or reject any or all quotations in accordance with applicable rules and institutional requirements.

5. Price Schedule

Sl. No.	Description	Qty.	Unit price (₹)	Taxes / charges (₹)	Total price (₹)
1	Electrochemical Workstation with Impedance Analyzer including specified accessories, software and laptop	1			
	Total quoted amount				

Amount in words: _____

6. Bidder Details and Declaration

Name of firm/company: _____

Registered address: _____

GSTIN: _____ PAN: _____

Name and designation of authorised signatory: _____

Email: _____ Telephone: _____

Make and model offered: _____

Delivery period: _____ Quotation validity: _____

We certify that the information provided in our quotation and the attached compliance statement is true and correct. We have identified all deviations, if any, and attached the relevant technical literature. We agree to the terms and conditions stated in the RFQ, subject to any exceptions expressly stated in our quotation.

Authorized signatory: _____ Name/designation: _____

Signature and seal: _____ Date: _____

Place: _____

COMPLIANCE STATEMENT**ANNEXURE I**

Equipment: Electrochemical Workstation with Impedance Analyzer

Purchaser / Institute: Centre for Nano and Soft Matter Sciences (CeNS), Bengaluru

Bidder / Supplier: _____ Quotation No. & Date:

Make / Model offered: _____ RFQ Reference No.:

Instructions: The bidder shall enter the offered specification and mark each item as Comply / Not Comply / Deviation. Any deviation must be clearly described and supported by the relevant manufacturer's datasheet or technical literature. Do not leave mandatory requirements blank.

Sl. No.	Section / Parameter	Required specification	Bidder compliance (Comply / Not Comply / Deviation)	Offered specification / remarks
1	A. General Specifications: Channels per unit	1 channel per unit		
2	A. General Specifications: Operating modes	Pot / Gal / ZRA / FRA		
3	A. General Specifications: Cell connections	2, 3, 4 or 5 electrode connections		
4	A. General Specifications: ADC/DAC resolution	16 bit		
5	A. General Specifications: Slew rate (no load)	5 MV/s		
6	A. General Specifications: Maximum sampling speed	100,000 samples/s		
7	A. General Specifications: Floating / earth-grounding	Both; switchable		
8	A. General Specifications: Input impedance	> 10 TΩ		
9	A. General Specifications: Input bias current	< 1 pA		
10	A. General Specifications: Onboard data backup memory	16 GB		
11	A. General Specifications: Physical dimensions	24 × 17 × 6 cm		
12	A. General Specifications: Channel cable length	100 cm		

13	A. General Specifications: Computer interface	1 USB per unit		
14	A. General Specifications: Power supply	100–240 VAC, 50–60 Hz		
15	B. Potentiostatic Input / Output: Compliance voltage	± 12 V per channel		
16	B. Potentiostatic Input / Output: Controlled-voltage scan ranges	4 ranges: ± 10 V, ± 5 V, ± 1 V, ± 0.5 V		
17	B. Potentiostatic Input / Output: Applied potential accuracy	0.1% of set point; 1 mV minimum		
18	B. Potentiostatic Input / Output: Applied potential resolution	0.003% of range; 15 μ V minimum		
19	B. Potentiostatic Input / Output: Measured potential accuracy	0.1% of measurement; 1 mV minimum		
20	B. Potentiostatic Input / Output: Measured potential resolution	0.003% of range; 15 μ V minimum		
21	C. Galvanostatic Input / Output: Maximum current	± 1 A		
22	C. Galvanostatic Input / Output: Current ranges	8 ranges, 100 nA to 1 A		
23	C. Galvanostatic Input / Output: Applied current accuracy	0.1% of range; 1 nA minimum		
24	C. Galvanostatic Input / Output: Applied current resolution	0.003% of range; 3 pA minimum		
25	C. Galvanostatic Input / Output: Measured current accuracy	0.1% of range; 1 nA minimum		
26	C. Galvanostatic Input / Output: Measured current resolution	0.003% of range; 3 pA minimum		
27	D. Impedance Analyzer: AC frequency range for EIS	10 μ Hz to 2 MHz		
28	D. Impedance Analyzer: AC frequency accuracy	0.005% or better		
29	D. Impedance Analyzer: AC frequency resolution	0.0004%; 3 μ Hz maximum (as stated in the specification)		
30	D. Impedance Analyzer: Potentiostatic amplitude	$\leq 100\%$ of range; 10 V maximum		
31	D. Impedance Analyzer: Potentiostatic amplitude resolution	240 μ V; 12-bit resolution		
32	D. Impedance Analyzer: Galvanostatic amplitude	$\leq 100\%$ of range; 1 A maximum		

33	D. Impedance Analyzer: Galvanostatic amplitude resolution	0.002% of range; 2.4 pA maximum (as stated in the specification)		
34	E. Software, Functions and Applications: Applications	Cyclic voltammetry; chronoamperometry; chronopotentiometry; pulse voltammetry (DPV, LSV, NPV, SWV, SV); OCP; constant power/resistance; single-frequency; Mott–Schottky; PITT; RDE; RRDE; battery capacity; CC–CV charge/discharge; constant-load/power discharge; EIS		
35	E. Software, Functions and Applications: Multichannel expansion	Multiple units shall connect to the same computer to form a multichannel system		
36	E. Software, Functions and Applications: Onboard data backup	16 GB memory backs up experimental data for recovery		
37	E. Software, Functions and Applications: Real-time adjustment	Voltage/current set points, OCP mode and sampling rates adjustable in real time		
38	E. Software, Functions and Applications: Experiment design	Prebuilt experiments and drag-and-drop custom experiment builder; no coding required		
39	E. Software, Functions and Applications: I–V measurement software	Licensed full version for I–V, I _{max} , P _{max} and fill-factor measurements; upgrades as required; compatible with the latest Windows OS		
40	E. Software, Functions and Applications: Operating environment	Optimum operating temperature 25 °C; air-conditioned room preferable		
41	E. Software, Functions and Applications: Software/support	User interface software and unlimited remote technical support included		
42	F. Additional Mandatory Requirements: Multichannel dummy cell	8-channel dummy cell for external cell calibration, with EMI shielding and GND option		
43	F. Additional Mandatory Requirements: Spectro-electrochemistry interface	Interface available for spectro-electrochemistry analysis		

44	F. Additional Mandatory Requirements: Floating / ground option	Instrument must provide floating / GND option		
45	F. Additional Mandatory Requirements: Multichannel software and waveforms	Software supports multiple channels with multichannel add-on and custom experiment design using multiple voltage/current waveforms		
46	G. Warranty: Warranty period	Minimum 2 years		
47	H. Accessories and Consumables: Ag/AgCl reference electrode	1 quantity; removable Teflon holder; 3 M KCl filling electrolyte; 6 mm tube with O-ring; high-quality frit		
48	H. Accessories and Consumables: Platinum mesh electrode with Teflon holder	1 quantity; 10 × 10 mm; 90.0% Pt mesh purity; mounted at Teflon end; Pt foil size 10 × 10 mm; mesh with wire total size 30 mm; 6 mm Teflon shaft with O-ring; gold-coated copper connecting rod		
49	H. Accessories and Consumables: Glassy carbon electrode	1 quantity; 3 mm diameter cylindrical casing; PTFE casing; mirror-finish surface; gold-coated connecting rod		
50	H. Accessories and Consumables: Mini electrode polishing kit	1 kit: 1.0 µm alpha alumina (~5 g); 0.3 µm alpha alumina (~5 g); 0.05 µm gamma alumina (~12 g); four 60 mm 1200-grit disks; four 60 mm microcloth polishing pads; one 70 mm support disc		
51	H. Accessories and Consumables: Gastight cell	1 quantity; 30 mL; borosilicate and Teflon; lid hole 6 mm; maximum temperature 100 °C; supplied with stand		
52	I. Laptop: Laptop supplied	1 quantity: Dell 15 Smartchoice; Intel 13th Gen Core i5-1334U; 16 GB RAM; 1 TB SSD; FHD 15.6 in (39.62 cm); Windows 11; MS Office 2024; Silver		

NOTE:

- (a) The sealed quotation, clearly superscribed “**Electrochemical Workstation with Impedance Analyzer**” and addressed to the Administrative Officer, Centre for Nano and Soft Matter Sciences (CeNS), Arkavathi, Survey No. 7, Shivanapura, Dasanapura Hobli, Bengaluru – 562162, shall be submitted on or before 09 November 2026 by 4:00 PM. Discount, if any, should be clearly mentioned.
- (b) Taxes & duties should be separately shown.
- (c) The quoted price should be valid for a minimum period of 3 months from the date of quotation.
- (d) Terms of payment: The payment in INR shall be made through NEFT/RTGS after delivery and successful installation of the items
- (e) Complete details such as the bank account number/IFSC/SWIFT/Bank Address, etc. should be provided along with the price bid.
- (f) The Centre reserves the right to accept or reject any quotation or part thereof without assigning any reasons.
- (g) It is mandatory for the bidder to have a local office and service support facility in Bengaluru to ensure timely service, prompt technical assistance, and effective after-sales support.