



## सी एस आई आर -राष्ट्रीय पर्यावरण अभियांत्रिकी अनुसंधान संस्थान

CSIR- National Environmental Engineering Research Institute

नेहरु मार्ग, नागपुर ४४००२०, भारत

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**शीर्षक :** **Supply, Installation and Commissioning of Inductively Coupled Plasma Mass Spectrometry (ICP-MS) के लिए ईओआई एवं मांगपत्र पूर्व सम्मेलन.**

**TITLE: Expression of Interest and pre-indent conference for Supply, Installation and Commissioning of Inductively Coupled Plasma Mass Spectrometry (ICP-MS)**

**Supply, Installation and Commissioning of Inductively Coupled Plasma Mass Spectrometry (ICP-MS)**

उपकरण आपूर्ति के लिए, यह संस्थान एक्सप्रेसन ऑफ इंटरेस्ट आमंत्रित करता है।

This Institute invites Expression of Interest (EOI) for **Supply, Installation and Commissioning of Inductively Coupled Plasma Mass Spectrometry (ICP-MS)**.

एक्सप्रेसन ऑफ इंटरेस्ट दिनांक \_\_\_\_\_ तक इस संस्थान में पहुँच जाना चाहिए। राष्ट्रीय पर्यावरण अभियांत्रिकी अनुसंधान संस्थान, नेहरु मार्ग, नागपुर-440020 के समिति कक्ष में दिनांक \_\_\_\_\_ सुबह \_\_\_\_\_ बजे माँग पूर्व सम्मेलन आयोजित किया गया है। The EOI must reach this Institute latest by date **08.04.2025**. A Pre-indent Conference has been scheduled to be held at **11.00 am on 11.04.2025** in the **Committee Room of National Environmental Engineering Research Institute, Nehru Marg, Nagpur-440 020. INDIA**

ईच्छुक पार्टियां अपने उत्पाद / मॉडल के तकनीकी प्रस्तुतीकरण तथा उसकी उपयोगिता, प्रौद्योगिकी, सुविधा, साहित्य, डिज़ाइन, तकनीकी पैरामीटर, ग्राहकी तथा अन्य संबंधित मुद्दों पर तकनीकी समिति से चर्चा करने के लिए तकनीकी रूप से सक्षम प्रतिनिधि नियुक्त कर सकते हैं। तकनीकी समिति मांग पूर्व सम्मेलन में भाग लेने वाले कंपनी / विक्रेताओं के क्रेडेंशियल्स / तकनीकी क्षमताओं / वित्तीय स्थिति का मूल्यांकन करेगी।

Interested parties may depute their competent technical representatives to make presentation of their product/ model(s) and discuss with the Technical Committee on the aspects of utility, technology, feature, literature, design, technical parameters, clientele and other related issues of the equipment. The Technical Committee shall also evaluate the credentials/ technical capabilities/ financial standings with track record of the companies/ vendors attending PIC.

### **Process of EOI and PIC :**

**Last date of submission of EOI : 08.04.2025.**

**PIC : on 11.04.2025 , Time 11.00 AM**

1) OEM/Suppliers/ Agent must :

a) Send Expression of Interest to participate in pre-indent Conference latest by date **08.04.2025** through e-mail.

- i) Send Printed technical Literature duly indicating point to point NEERI requirement and offered point to point technical compliance, as per Annexure-III.
- 2) Attend Pre-Indent Conference by fully Technical Competent personnel on : **11.04.2025** to present before CSIR-NEERI Technical Committee:
  - i) Specific Model and make : meeting CSIR-NEERI technical specifications.
  - ii) One printed copy of Supporting Technical Literature.
- 3) Tentative Technical Specification are as per **Annexure – I**
- 4) Qualification requirement are as per **Annexure-II**

मांग पूर्व संमेलन में भाग लेने के लिए तकनीकी रूप से सक्षम प्रतिनिधि को अधिकृत किया जाना चाहिए जो जगह पर निर्णय ले सकें तथा समिति द्वारा उठाए गए बिन्दुओं की पुष्टि कर सकें। तकनीकी प्रतिनिधि नीरी तकनीकी समिति द्वारा अंतिम रूप दिये गए तकनीकी विनिर्देशों पर हस्ताक्षर करने के लिए सक्षम होना चाहिए। Technically competent representative should be authorized for attending Pre-Indent Conference who can take on the spot decision and confirm on the points raised by Technical Committee. Technical representative should be able to sign the final technical specifications finalized by the NEERI Technical Committee.

Kindly note that post EOI & PIC, OTE/GTE shall be floated under two bid system and participation in the same shall not be restricted to participated bidders of EOI.

Interested parties may submit EOI regarding **Supply, Installation and Commissioning of Inductively Coupled Plasma Mass Spectrometry (ICP-MS)**, addressed to the Director, CSIR-NEERI, Nehru Marg, Nagpur- 440 020 by email on [st\\_pur@neeri.res.in](mailto:st_pur@neeri.res.in), [spo@neeri.res.in](mailto:spo@neeri.res.in), [s\\_nimsadkar@neeri.res.in](mailto:s_nimsadkar@neeri.res.in).

**भंडार एवं क्रय अधिकारी /Stores & Purchase Officer**  
**CSIR-NEERI, Nagpur**

**Tentative Specifications / requirement (Annexure- I)**

**Supply, Installation and Commissioning of Inductively Coupled Plasma Mass Spectrometry (ICP-MS)**

**Specifications for Procurement of Inductively Coupled Plasma Mass Spectrometry (ICP-MS)**

Sr. No.	Items description
1.	<b>Peristaltic pump</b> : Three channels or more Speed: Minimum 30 rpm or more
2.	<b>Spray chamber</b> : Quartz, Temperature range $\leq -5^{\circ}\text{C}$ to $\geq +20^{\circ}\text{C}$
3.	<b>Mass Range</b> : 5 – 280 amu or better
4.	<b>Mass Resolution</b> : $\leq 0.7$ amu
5.	<b>Mass Stability</b> : $\leq 0.050$ amu
6.	<b>Torch</b> : Quartz torch
7.	<b>Collision cell and Reaction cell (CRC):</b> a) Operating in Standard (No gas) b) Collision (KED) and Reaction gas modes. c) Two mass flow controllers one for Helium and second for other reactive gases
8.	<b>Dwell Time</b> : $\leq 100$ $\mu\text{S}$
9.	<b>Sensitivity</b> : ${}^7\text{Li} \geq 60000$ cps/ppb and ${}^{238}\text{U} \geq 300000$ cps/ppb
10.	<b>Vacuum system</b> : Three stage vacuum system or better
11.	<b>Chiller</b> : Compact and Temperature working range $5^{\circ}\text{C}$ to $35^{\circ}\text{C}$
12.	<b>RF Generator</b> : 27 MHz or more, Power range 500W - 1600W or more
13.	<b>Detector</b> : Dual mode, Discrete dynode electron multiplier, Calibration linear range 10 orders of magnitude or more
14.	<b>Auto sampler</b> : Minimum 200 samples position or more for 15mL vials
15.	The system should have integrated AGD or UHMI or AMS dilution capabilities for high total dissolved solids (TDS)
16.	<b>Software</b> : The ICPMS controlled by Licensed Software, Compatible for Data processing, calibration, report generation & Method development operating through computer
17.	<b>Data Station</b> : Computer with following configuration should be provided Processor : i7 or higher; SSD:1TB ; RAM : 32GB DDR5 or better, Monitor: 27" LED or better; System should be Wi-Fi enabled, Operating system: Licensed Windows 11 or higher with Licensed MS Office 21or higher
18.	<b>Installation Commissioning &amp; Training</b> : All standard Accessories including test kits, Multi elements minimum 25 elements Calibration standards, Gas manifold system for two cylinders, Exhaust fume hood system, Two stage Regulators and gas purification panel for- Helium, Oxygen, Hydrogen and CH <sub>4</sub> should be provided by the supplier to make the instrument operational. Three days operational and maintenance training at CSIR-NEERI, Nagpur



19.	<b>Warranty:</b> One year standard warranty + Two years Extended warranty (Three years warranty from the date of installation)
20.	<p><b>Additional Consumables</b></p> <ol style="list-style-type: none"> <li>1) Nickel Cones: Sampler cones, Skimmer cones and/or hyper skimmers) - 05 sets each</li> <li>2) Platinum Cones: sampler, Skimmer and/or hyper skimmers with all inserts- One set</li> <li>3) Torch -04 Nos.</li> <li>4) Nebulizer - 10 Nos</li> <li>5) Spray chamber - 10 Nos.</li> <li>6) Assorted Peristaltic pump tubing - 10 set each</li> <li>7) Pump oil – 2 L.</li> <li>8) Autosampler Vials -500 Nos.</li> <li>9) Autosampler probe -02 Sets</li> <li>10) Drain Tubing – 5 Sets</li> <li>11) Sample Tubing – 5 Sets</li> <li>12) Assorted Tubing - 10 sets each</li> <li>13) Assorted O-ring - 05 sets each</li> <li>14) Standard Mode setup solution- 500mL X 5nos</li> <li>15) KED Mode setup solution- 500mL X 5nos</li> <li>16) HF resistant kit (PFA) including nebulizer, spray chamber, torch, injector- one set each</li> </ol>

**Annexure – II**  
**Qualification Requirement**

**Pre–Qualification & Eligibility Criteria**

Sr. No.	Qualification requirement	Documents required	Complied /Agreed Submitted Document
1.	Vendors / supplier / manufacture / Indian agent should not be debarred /black listed by any government organization / GeM for any product for the past three years. If the same is detected at any stage the contract will be terminated.	Undertaking to be submitted -on company letter head separately	
2.	Performance certificate or installation report and purchase order of 01 users from government organization or State government or Central University or PSU for the past two years.	Copies of the certificates	
3.	Installation, Operational and Performance qualification (IQ/OQ/PQ) must be performed at site CSIR-NEERI Nagpur	Undertaking to be submitted on company letter head separately	
4.	Bidder must Quote latest model complying the technical specification mentioned in chapter 4	Undertaking to be submitted on company letter head separately	
5.	Vendors should have their application lab in India	Undertaking to be submitted on company letter head separately	
6.	Vendors should have their application note on public domain and on their web site	Undertaking to be submitted on company letter head separately	

Agreed & Submitted with Seal & Sign:- .....

Seal & Signature of the Principal / Indian Agent

**Annexure – III**

**तकनीकी विनिर्देश अनुपालन एवं विचलन प्रपत्र**

**Technical Specification Compliance cum Deviation Form**

नीरी निविदा सं के अनुसार तकनीकी अनुपालन / Technical Compliance against NEERI Tender No.

Sr. No.	NEERI's Technical Specifications	Vendor Quoted Specification	In case of Compliance, supporting printed technical literature mentioning page no. Column & line has also to be highlighted	Deviations to NEERI specifications if any,	Reasons for deviations	Special Remarks if any,
1.	2.	3.	4.	5.	6.	7.

स्थान / Place:

तारीख / Date:

निर्माता / बोलीदाता के हस्ताक्षर एवं सील

Signature and Seal of the Manufacturer/Bidder