



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 **09.10.2023**. A Pre-indent Conference has been scheduled to be held at **11.00 hrs on 11.10.2023** 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 : 09.10.2023 .

PIC : on 11.10.2023 , Time 11.00 AM

- 1) OEM/Suppliers/ Agent must :
 - a) Send Expression of Interest to participate in pre-indent Conference latest by date **09.10.2023** 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 : **11.10.2023** 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.

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, spo@neeri.res.in, 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)**

Sr. No.	Items description
1.	Peristaltic pump : Four channels with 100 rpm speed
2.	Spray chamber : Quartz, Temperature range -10 °C to +20°C
3.	Mass Range : 7 – 260 amu or better
4.	Mass Resolution : ≤ 0.5 amu
5.	Mass Stability : ± 0.025 amu
6.	Torch : Single piece Quartz torch with gas connectivity. Automatic Torch position adjustment
7.	Cones : Sample Cone orifice diameter 1.1 mm or less Skimmer cone orifice diameter 0.5 mm or less
8.	Collision cell and Reaction cell (CRC): a) Operating in Standard (No gas) b) Collision (KED) and Reaction gas modes. c) Two gas mass flow controllers one for Helium gas and other for Hydrogen / Oxygen / Methane or Ammonia gas
9.	Dwell Time : ≤ 100 μ S
10.	Background (cps) : ≤ 1
11.	Detection Limit (He gas mode $^9\text{Be} / ^7\text{Li}$) : ≤ 0.5 ppt
12.	Vacuum system (with Noise reduction enclosure): a) Three stage vacuum system or better b) The pumps should be a fume and acoustic free
13.	Chiller – Compact and acoustic free suitable re-circulating chiller with Noise reduction enclosure, Temperature working range 5°C to 35°C
14.	RF Generator : 27 MHz , power range 500W - 1600W or better
15.	Detector : Dual mode (pulse counting and analog mode) Discrete dynode electron multiplier, Calibration linear range over 10 orders of magnitude
16.	Auto sampler with diluter : Minimum 200 samples position or more for 15mL vials with two probes
17.	Software : The MS & UPLC controlled by single Licensed software, Compatible for Data processing, calibration, report generation & Method development with 21 CFR Compliance
18.	Data Station : Computer with following configuration should be provided Processor: i7 or higher; SSD:1TB ; RAM: 32GB DDR5 or better, Monitor: 27" LED or better; Operating system: Licensed Windows 11 or higher with Licensed MS Office 21 with all in one printer
19.	Gas Purification Panel – Argon, Helium, Oxygen, Hydrogen, CH ₄ and NH ₃ with all required fittings
20.	Two stage Regulators - Helium, Oxygen, Hydrogen, CH ₄ and NH ₃ (Each one)

21.	Installation Commissioning & Training: 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 - Helium, Oxygen, Hydrogen, CH ₄ and NH ₃ (Each one) should be provided by the supplier to make the instrument operational. Three days operational and maintenance training at CSIR-NEERI, Nagpur
22.	Warranty: One year standard + Two years extended warranty. (Three years warranty from the date of installation)
23.	<p>Additional Consumables to be quoted separately</p> <ol style="list-style-type: none"> 1) Nickel Cones : Sampler cones, Skimmer cones and/or hyper skimmers) - 03 sets each 2) Platinum Cones: sampler, Skimmer and/or hyper skimmers with all inserts- One set 3) Torch -03 Nos. 4) Nebulizer - 03 Nos 5) Spray chamber - 03 Set 6) Assorted Peristaltic pump tubing - 10 set each 7) Pump oil – 2 L. 8) Autosampler Vials -500 Nos. 9) Autosampler probe -02 Sets 10) Assorted Tubing - 05 sets each 11) Assorted O-ring - 05 sets each

Annexure – II
Qualification Requirement

S.No.	Qualification requirement	Complied/ Agreed/ Accepted
1.	Suppliers shall provide spares after sales service at no cost to NEERI during the standard & extended warranty period	
2.	Vendors / supplier / manufacture / Indian agent should not be debarred/blacklisted by any government organization / GeM for any product. If the same is detected at any stage the contract will be terminated.	
3.	Performance certificate of 05 users of the quoted model from government organization.	
4.	Vendors should quote their latest model only	
5.	Installation, Operational and performance qualification (IQ/OQ/PQ) must be performed at site CSIR-NEERI Nagpur	
6.	To maintain sanctity of tendering system one Indian agent cannot represent two different foreign principals in one tender	

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