

सी एस आई आर -राष्ट्रीय पर्यावरण अभियांत्रिकी अनुसंधान संस्थान

CSIR- National Environmental Engineering Research Institute

नेहरु मार्ग, नागपुर ४४००२०, भारत

Nehru Marg, Nagpur – 440 020 (M.S.), India

टेलीफोन Telephone 0712-2249992,2249746,2226705

ईमेल Email:- spo@neeri.res.in, st_pur@neeri.res.in

वैबसाइट Website: www.neeri.res.in



CORRIGENDUM

PUR-189/EP/SEAF/2023-24

Date: 06.11.2023

After the Pre-Bid meeting held on 02.11.2023, Technical specifications of Inductively Coupled Plasma Mass Spectrometry (ICP-MS) is amended and revised specification is as per Annexure-A.

Qualification requirement, Terms & Conditions, Bid submission end date and Bid opening date will remain same.

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

[Signature]
06/11/2023

[Signature]
06/11/2023

Revised Technical specifications of Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Sr. No.	Items description
1.	Peristaltic pump : Three channels or more Speed: Minimum 30 rpm or more
2.	Spray chamber : Quartz, Temperature range $\leq -5\text{ }^{\circ}\text{C}$ to $\geq +20\text{ }^{\circ}\text{C}$
3.	Mass Range : 7 – 260 amu or better
4.	Mass Resolution : ≤ 0.5 amu
5.	Mass Stability : ≤ 0.050 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 and Ammonia gas
9.	Dwell Time : $\leq 100\text{ }\mu\text{S}$
10.	Background (cps) : ≤ 1
11.	Sensitivity : ${}^7\text{Li} \geq 55000\text{ cps/ppb}$ or ${}^9\text{Be} \geq 6000\text{ cps/ppb}$
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 $5\text{ }^{\circ}\text{C}$ to $35\text{ }^{\circ}\text{C}$
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.	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, CH4 and NH3 (Each one) should be provided by the supplier to make the instrument operational. Three days operational and maintenance training at CSIR-NEERI, Nagpur
21.	Warranty: One year standard + Two years extended warranty. (Three years warranty from the date of installation)
22.	<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 12) HF resistant kit (PFA) including nebulizer, spray chamber , torch, injector- one set