



भाकृअनुप - केन्द्रीय मात्स्यिकी प्रौद्योगिकी संस्थान
ICAR - CENTRAL INSTITUTE OF FISHERIES TECHNOLOGY
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(ISO/IEC 17025: 2017 Accredited & ISO 9001: 2015 Certified)

F.No.6-39/2025-Purchase

Date: 17.08.2026

CORRIGENDUM

GeM Bid No. GEM/2026/B/7850140 dated 29.07.2026

The following modifications are incorporated in the **GeM bid for ICP-MS**

Sl. No. in the Technical Specification	Amended specification
1.	(i) Advanced technology bench-top ICP MS with cell collision or better technologies. The system should be complete in all respects with built in features of hardware & software. (ii) Analysis of trace metals to ppb/ppt level in diverse kind of samples like Food, Sea food, Water, etc. (iii) Capable of analyzing all the metals precisely and accurately in ppm, ppb and ppt levels. (iv) The system should be a space saving, compact bench-top model that can fit into allocated lab space with all the sub-systems and accessories. (v) All internal and external parts should be made of corrosion-resistant material. (vi) Open architecture design for sample introduction system for ease of operation in switching between GC/LC/IC
7.	Guaranteed/factory specifications will be considered not the Typical performance Detection Limit ng/L (ppt): (i) Low mass (Be^9/Li^7): ≤ 0.5 (ii) mid mass $\text{Y}/\text{In}/\text{Co}^{59}$: ≤ 0.1 (iii) High Mass $\text{U}/\text{Tl}/\text{Bi}$: ≤ 0.1 (iv) Sensitivity (Mcps/mg/L) (v) Low mass (Be^9/Li): ≥ 50 or better (vi) Mid Mass In/Y: ≥ 160 or better; (vii) High Mass $\text{U}/\text{Tl}/\text{Bi}$: ≥ 80 (viii) Oxide ratio: $\text{CeO}^+/\text{Ce}^+ \leq 2.5\%$; (ix) Isotope-ratio Precision: $\text{Ag}^{107}/109$: 0.3% RSD (x) Background noise (no gas mode) @ 4/9 amu or suitable: ≤ 0.4 to ≤ 1 amu or better (xi) Mass resolution (5-260 amu): Variable ≤ 0.4 to ≤ 1 amu or better & should be definable in mass range 5-260amu

11	An auto sampler should be provided with a sample vial capacity (10 ml and 50ml) of minimum 60 with 15 ml, 50ml and 7- 8 ml capacity tube racks for different volume with online internal standard addition, with complete enclosure & duct to avoid contaminations & acid fumes
13.	i) A workstation should be provided for controlling the ICPMS and the auto-sampler with data acquisition & for data processing and analysis with minimum following specification: Deleted (ii) Suitable branded PC, LED monitor 24" or better, Memory /RAM: Minimum 16 GB or higher (iii) Hard disk: 1 TB or better, CPU: Dual/i7 Processor, 3.5 GHz or better Deleted (iv) Operating system: Latest Windows configuration, 64 bit or better. Deleted (v) Duplex, Black and White LaserJet printer with LAN, Network Card and Bluetooth facility. Deleted (vi) All hardware and software including drivers monitor, device interfaces cards/network must be preinstalled and preconfigured on the computer provided. Deleted Factory fitted/factory certified workstation for controlling the ICPMS and the auto-sampler with data acquisition & for data processing and analysis (vii) Original licensed software Operating system and MS office (MS-WORD, MS EXCEL, MS POWERPOINT). Deleted (viii) Factory certified PC should have the same warranty of two years as the ICP-MS.
14.	(i) Pre requisite for ICP-MS: Suitable gas cylinders of UHP grade- Argon - 4 nos.; Others - 02 Nos. each (with requisite certificate) with all accessories such as dual pressure SS regulator, gas purification panel unit / Inline filters such as Oxygen trap, Moisture trap, etc. Cylinder cage or Bracket should be supplied and commissioned. The supplier for the connection of instrument should do the gas lining panel work. (ii) Branded Automatic gas manifold for gas changeover (2 sets) to be supplied and commissioned by the supplier at their own at the lab. All the items cylinder, regulator, gas purification panel unit, cylinder cage or Bracket etc. should be covered under two year's comprehensive warranty. (iii) The following documents should be supplied along with the cylinder: (a) Manufacturer Certificate; (b) Hydrostatic test certificate; (c) The Chief Controller of Explosives, Nagpur (CCOE-NAGPUR) gas filling approval certificate and (d) Purity certificate
16.	(i) Reputed True online Branded UPS system of 20 KVA capacity or above better suitable with power factor correction and harmonic, Three phase 440V /240V for the smooth running of ICP-MS with battery back-up of minimum 1 hr with 80 % load capacity with comprehensive warranty of minimum 2 Years inclusive of SMF or latest. The electrical work of the UPS system should be done by the supplier for the connection of instrument. (ii) Deleted (iii) The maintenance of UPS system and batteries is responsibility of ICP-MS supplier. Any malfunction of ICP-MS due to UPS and its batteries failure, the supplier of ICP-MS has to take whole responsibility and rectify the same during warranty period.

18(i) Warranty for ICP including MDS	(i) Minimum 2 years from the date of completion of IQ, OQ and PQ of the equipment to the satisfaction of lab including Chiller, UPS system with batteries, Microwave Digestion system and all accessories. (with free replacement of any part). (ii) Tune solution: Tuning and performance solution to cover the Warranty period (iii) Setup solution: Detector and Mass calibration Solution to cover warranty period. (iv) NIST calibration standards 21 elements 100ppm (250ml) to cover the warranty period. Deleted (v) The date of warranty period for ICP-MS including Chiller, UPS system with batteries, PC, Printer, Gas cylinders with its accessories and all associated supply of ICP-MS, which will start from the date completion of IQ, OQ and PQ of ICP-MS. (vi) It should cover hardware, software as well as wear and tear consumables (except column and sample preparation), Up-gradation of software to the latest version (if applicable), prompt service (within 24 hours on-call), training and application support during the period. (vii) In case of breakdown of the system, the query has to be attended immediately within 24 hrs & servicing to be done within 48 hrs by the supplier during the warranty period and incase of major breakdown, maximum down time period is 1 Week, if it's not attended the warranty will extend accordingly. (viii) At least one minimum preventive maintenance visit shall be carried out annually, including supply of one PM Kit per year at free of cost during warranty period
19.	(i) Should have a good after sales service/technical support capable of reaching at short notice the places where ICP-MS is proposed to be installed. Visits and unlimited breakdown calls by service /application support, engineers should attend within 48 hours without fail for ICP-MS including Chiller and UPS system (ii) Troubleshooting (Instrumentation/Applications) and when required free of cost. (iii) Training twice in a year free of cost. (iv) The vendor should also assure supply of spares, accessories, consumables and service for at least 10 years. (v) Both AMC & CMC for ICP-MS including Chiller to be quoted separately, for 3 years after warranty. Terms and conditions for the AMC & CMC after the warranty period has to be specified. (vi) The application and method development support must be rendered, as and when required. (vii) CMC price for 3 years after warranty quoted by the vendor will be considered for finalizing the L1. However, it needs to be submitted separately as a price breakup document.
21. Spares and accessories	(i) Single element standards as per FSSAI regulatory requirements (including Arsenic, Mercury & Selenium) of 100 ml of 100ppm, traceable to ISO 17034. (ii) (Standard Tool kit should be provided for Instrument maintenance (iii) Tubing – Auto Sampler to Peristaltic Pump - 2 nos. (iv) Auto sampler Tubes/Vials or equivalent 15ml and 50 ml -500 Nos each along with suitable tray/ stand. (v) Mist/Concentric/Standard or equivalent nebulizer, as required- 2 nos (vi) Plasma Torch with injectors & required shield /guard/bonnet (as

	applicable)- 2 nos (vii) Auto sampler probe with tubing-2 no.s (viii) Trace Metal Grade Acids (HNO₃)-1L: 1 no. (ix) Tune/Calibration Solutions 1 Each (x) Chiller coolant -10L (xi) Chiller filter - 02 nos. (xii) Nickle tipped sampler, Skimmer cones with O rings -02 set (xiii) Platinum sampler, Skimmer cones with O rings: 02 set (xiv) Standard spray chamber -2 Set (xv) Standard Peristaltic pump tubing for drain-2 nos. (xvi) Standard Peristaltic pump tubing for samples 2 nos. (xvii) Peristaltic pump tubing for ISTD: 2 nos. (xviii) Oil Element/Mist Filter -02 set (xix) Vacuum Pump oil - 5 litre (xx) Swab-cotton tipped both ends (pk/100)-2 pack (xxi) Cone cleaning reagents (if required) (xxii) Alumina powder - 2 Pk (xxiii) Polishing paper Kit: 2 Pk (xxiv) Cone/ Lens cleaning solvent/solution - 2 Nos. (xxv) Air filter-1 nos (xxvi) Argon Filter: 1 no.s (xxvii) Instrument filter: 1 no.s (xxviii) Branded Bottle top Acid Dispenser: 1-10 ml capacity: 2 no's. Spares and accessories are to be supplied in addition to standard supplies with the equipment needed for smooth functioning of the equipment for end use.
27 to 38	Deleted. MDS is no longer part of this specification.

All others remain unchanged.


Asst. Administrative Officer (Purchase)