
 <p>भाक अनुप ICAR</p>	<p>पादप कार्यिकी संभाग DIVISION OF PLANT PHYSIOLOGY भा.कृ.अ.प.—भारतीय कृषि अनुसंधान संस्थान ICAR-Indian Agricultural Research Institute नई दिल्ली—110012 (भारत) NEW DELHI - 110 012 (INDIA)</p>	 <p>भारतीय कृषि अनुसंधान संस्थान IARI 1932</p>
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File No.21-4/AIC/CHNS/24-25/SFC

Dated: 14-01-2025

NOTICE FOR E-PROCUREMENT THROUGH GeM

Online GeM e- bid are invited from reputed Manufacturere/Supplier/Authorized dealer in two bid system (Technical and Financial) for purchase of scientific equipment **CHNS Elemental Analyzer with Accessories, Qty. 01 No. for Agricultural Innovation Centre** on behalf of Director, ICAR-Indian Agricultural Research Institute, New Delhi. Please visit www.iari.res.in for details Rules and Regulation and log in www.gem.gov.in for online e-bidding.

Details of Gem Bid is/are as mentined below:

GeM Bid No.	GEM/2025/B/5816994
Bid Submission start date and time	14-01-2025
Last Date & Time for submission of bid	04-02-2025 16.00
Date & Time for opening of Technical Bid	04-02-2025 16.30

Sd/-
Asstt.Admn.Officer

Annexure

CHNS ELEMENTAL ANALYZER WITH ACCESSORIES

Technical specifications

1. Operating mode: It should be capable to operate for measurement in CHNS mode
2. Analytical range: Element Range for C, H, N, S from 100ppm to 100% or better / 0.001 to ≥ 1 mg
3. Accuracy/precision: $\leq 0.3\%$
4. Furnace Temperature: The maximum operating temperature should be 1100 °C or above
5. Analysis Time of CHNS should be less than 10 minutes
6. The sample size should be minimum 0.1mg to 500mg or more
7. Sample Type: solid and liquid samples
8. Sampling should be by auto sampler.
9. Must have the facility to use either or both Argon and Helium as carrier gas
10. Separation of gases: Time resolved Gas Chromatographic Separation/ Frontal Chromatography and Thermal Conductivity Detection/ TCD or thru separate Infra-Red cells & Thermal Conductivity Detector.

General Specifications

11. The carrier & combustion gas must be under electronic flow control for precise & reproducible flow settings for automated analysis by chromatography/ IR separation or any other module
12. The system should have capability of monitoring leakage of gases and automatic wake up of analyser
13. The system should have **ash removal assembly** to allow removal of ash of combusted samples without the need to change the combustion tube.
14. Should supply CHNS analysis kit (tin capsules, Standards, Water traps, quartz wool, GC packed column) for 2000 samples or more
15. Branded PC having latest configuration should be supplied with instrument. The latest Microsoft windows based licensed software should be supplied. The software should have the ability to data access, storage and analysis. Possibility of converting data into ASC I format and export the same for further manipulation.
16. Should supply Gas cylinders: High purity (99.999%) oxygen and helium gas cylinder (capacity 47 liter) with double stage double meter gas regulator with stainless steel diaphragm and pressure gauge suitable for above cylinder should be quoted.
17. Should supply micro-balance: Micro Balance interfactable with Computer for automatic weight transfer, six place or more accuracy, 1 μ g or lesser resolution and calibration certificate
18. Spare Parts: Standard parts (fittings, fuses, o-rings, tubing etc.) for trouble free operation for three years
19. Tool kit: 01 No. (Spanners, Allen keys, screwdrivers, Spatula etc.)
20. Power requirement: Single phase, 220 V, 50 Hz
21. Manuals: Hard copy of Operation, Service & User Manuals to be supplied
22. Warranty: Furnace should have warranty for 10 years or more & other parts of the system should have warranty for 2 years or more from the date of installation.
23. Availability of consumables & spare parts: Consumables should be available locally and can be purchased in INR Spares, accessories for next ten (10) years to be assured
24. Branded Online UPS 5 KVA capacity with 30 mins back-up
25. A sturdy table or bench with storage to be supplied by the firm for operation of the equipment
26. ISO certificate of manufacturer to be enclosed
27. List of users with complete address, phone number/ email id to be provided
28. Each bidder must provide detailed printed catalogues highlighting each of the required specifications in the same along with their technical bids failing which they are liable to be technically rejected. Do mention if your instrument has any special feature/specification other than those asked above.
29. The bidder must be competent to install and impart training to use the instrument and to troubleshoot during operation.
30. The price should include all taxes and duties, delivery and installation

It is certified that the specification mentioned above for CHNS ELEMENTAL ANALYZER WITH ACCESSORIES is generic in nature and have been made by searching on the internet made by three principal manufacturers for similar equipment. The generic specification is expected to elicit adequate response if tender for the same is floated/quotation invited for the procurement of the same. The specifications are generic in nature.