
 <p>भाकृ 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 1992</p>
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File No.21-6/AIC/XRF/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 **X-Ray Fluorescence (XRF) Spectrometer Employing Energy Dispersive Detectors (EDXRF)**, 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/5817007
Bid Submission start date and time	14-01-2025
Last Date & Time for submission of bid	05-02-2025 13.00
Date & Time for opening of Technical Bid	05-02-2025 13.30

Sd/-
Asstt.Admn.Officer

Annexure

X-ray fluorescence (XRF) spectrometer employing energy dispersive detectors (EDXRF)

Technical specifications

1. Mineral analysis principal Energy Dispersive X-ray fluorescence spectrometry (EDXRF)
2. Application suitability Food and agriculture for non-destructive elemental analysis of solids, liquids and powders etc.
3. Element measurement range Sodium (Na) to Uranium (U)
4. X-ray tube excitation with resolution above 125eV
5. High resolution silicon drift detector (SDD)
6. Measurement atmosphere Standard air atmosphere. Provision for helium (inertgas) and vacuum attachment provision for upgradation on site later.
7. At least 10 sample position automatic tray/turret/carousel.
8. Measurement Limit sub ppm to 100% / Lower detection limit 0.1 to 100 ppm

General Specifications

9. The Sample analysis chamber must have proper safety standard /locking system to prevent accidental opening and exposure of the operator with x-ray radiation
10. Installed software Quantitative analysis with all capabilities; interference and drift correction along with original CD/pen drive
11. Instrument should comply to Indian power supply: 220-240V 50Hz
12. The price should include all taxes and duties, delivery and installation
13. Two-year comprehensive warranty from the date of installation
14. Spares and consumables 500 nos of plastic sample cups; 2 set extra sample cup holders; 1 set extra secondary windows; 1 extra cup loading tray; and cup window film sufficient for 20000 samples
15. Online UPS Branded 5 KVA capacity with one-hour back-up
16. 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.
17. The bidder must be competent to provide training (free-of-cost) after installation to handle the instrument and to troubleshoot during use with strong after-sales-service support. The price should include all taxes and duties, delivery and installation. two copies of service/operation manual along with main equipment free of cost.
18. User interface/Embedded PC with LCD screen (or) standalone branded all-in-one PC with 12th Gen Intel i5 or better processor, 8 GB RAM, 500 GB SSD storage, windows 11/latest version
19. Preloaded methods for Fe, Zn and Calcium, re-standardization option to correct the stored Calibration. Calibration standards should be arranged by supplier. Any energy calibration or optimization standards to be included with instrument.
20. Appropriate drift correction monitors for instrument should be supplied. Supplier should mention clearly in the offer.
21. Safety and quality Quoted model should be certified ISO and CE or similar with valid documents, certified and approved by AERB [Atomic Energy Regulatory Board] and relevant NOC. Supplier must assist IARI in obtaining NOC and user License from AERB installation on site.
22. A sturdy table with storage to be supplied by the firm for operation of the equipment
23. Calibration for Food Grain samples must be possible for the model of instrument quoted and provided preinstalled free of cost. The relevant valid document and references in this regard must be submitted while quoting the equipment. There should be minimum 5 installations of the instrument in ICAR or CGIAR institutes, reputed Universities, CSIR labs or research Institutes in India. The list should be provided with user details. The vendor should be able to demonstrate and test the samples in the quoted instrument during technical evaluation.

It is certified that the specification mentioned above for X-ray fluorescence (XRF) spectrometer employing energy dispersive detectors (EDXRF) is generic in nature and have been made by searching on the internet made by three principal manufacturers for similar equipments 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.