

**Notice Inviting Open Tender for:
Supply, Installation, Commissioning & Training of a Wavelength Dispersive X-
ray Florescence Spectrometer (WD-XRF) facility at the Indian Institute of
Science, Bangalore**

(Tender from Global Vendor and Suppliers)

Bids are invited from global OEM / authorized distributor of global OEM

(Last date of Submission July 26, 2023)

Date: June 06, 2023

Dear Sir/Madam:

Please send your tender documents valid for 180 days from the actual date of opening the technical bid, for the supply of equipment described below. Your documents/quotation should clearly indicate the terms and conditions of the quotations, delivery schedule, entry tax, payment terms, warranty coverage etc. The tender should be submitted in two separate sealed envelopes – one containing the “Technical bid” and other containing the “Commercial bid”, both of which should be duly signed and must reach the undersigned on or before 17:00 hours July 26, 2023. Please provide your contact details so that we can get in touch with you and set-up appointments for opening the bids.

The primary interest of the Centre is the procurement of **Wavelength Dispersive X-ray Florescence Spectrometer facility**. Any vendor(s) who are not manufacturers of **Wavelength Dispersive X-ray Florescence Spectrometer** should NOT quote for optional items independently. However, such vendor(s) are allowed to quote the optional components along with a compatible a **Wavelength Dispersive X-ray Florescence Spectrometer** quotation. The pricing for the instrument(s) must be a stand-alone purchase and as a bundle-purchase should be clearly indicated in the financial bid.

Mailing Address:

The Chair,
Purchase Committee,
Centre for Earth Sciences,
Indian Institute of Science,
Bangalore 560012,
Karnataka, India.

Email Addresses:

office.ceas@iisc.ac.in

Cc: sajeev@iisc.ac.in

Section 1 - Eligibility Criteria:

Pre-Qualification criteria:

- A) Equipment offered must be a model from the current serial production range of the manufacturer. Customized or One-off Manufactured Model will not be

accepted. Offer should be supported with printed catalogue / depiction on company website.

- B) The local vendor of OEM must have supplied at least 10 XRFs to IITs, IISERs and other Govt. of India organizations. Please attach a reference list of supplies in last 2 year with contact details (Name, Phone, email address) of users.
- C) The company should be original equipment manufacturers (OEMs) of the XRF. Please attach exclusive authorization certificate(s) specific for this tender with quote without which bid will be rejected.
- D) The manufacturer must be an ISO9001 company & equipment model must be with CE compliance. Please attach relevant certificates.
- E) The Bidder's firm should have existed for a minimum of 5 years. (Enclosed Company Registration Certificate)
- F) The Bidder should have qualified technical service personnel for the instrument(s) based in India.
- G) If the Bidder is a local distributor/dealer/Agent, attaching an authorization certificate with the technical bid from the original equipment manufacturer is mandatory.
- H) The bidder should sign and submit the declaration for Acceptance of Terms and Conditions as per -Annexure 1.
- I) The Bidder must not be blacklisted/banned/suspended or have a record of any service-related dispute with any organization in India or elsewhere. A declaration to this effect has to be given as per Annexure 2.

Section 2– Technical Specifications:

Features	Specification
X-ray	X-ray generator 4kW or above, max. 60kV-150mA or above. Built-in water cooled heat exchanger Primary beam filter changer (e.g., Al25, Al125, Ni40 and Ni400 or similar) X-ray tube Rh, Be window
Sample changer	~40-50 sample capability (or more)
Diaphragm changer	6 positions or more (e.g., 35, 30, 20, 10, 1, 0.5 mm in diameter)
Crystal changer positions	8 or more with the standard crystal set
Crystals	5 or more high sensitivity crystals, including curved crystals are required. (High sensitive versions of LiF, PET, Ge to cover all major elements must be included)
Analytical capability	All major elements. Crystals details must be decided before quotation submission. High resolution and high intensity mapping Spot analysis capability
Sample type	Solid , Loose Powder, Pressed Pallet, Fused Bead
Detectors	Scintillation counter Proportional counter (Gas flow)
User Interface	Computer controlled user friendly interface for the smooth routine operation
Display	A computer system with 24 inch or more display

computer and operation software	with latest Windows OS and all the necessary supporting software to run the XRF and all the other accessories. The software should have function like auto-focusing, drift correction, dynamic focus, auto-contrast/brightness etc.
Vacuum system	Must be integrated with the original system
Cooling system	Must be integrated with the original system
Software package	Qualitative and quantitative package for major and trace elements analysis using inbuilt standards suitable for geological, biological/pharmaceutical and metal/material samples. Software supporting user interactive scandalization and data calibration especially for geological (major and trace elements), biological/pharmaceutical and metal/material samples. Fast mapping capability (ideal with wavelength dispersive mode) with data processing Export of results to Tiff, Jpeg, MS® Word, Excel and pdf.
Spare parts and consumables	One set of spare parts and consumables for the XRF and all accessories must be included along with the delivered equipment
Accessories	The offer should include all the required accessories/ spares/ consumables for seamless performance of the system and its peripherals ideally not from a third-party vendor or approved by the original manufacturer. A list of spares and consumables should be provided. Examples: <ul style="list-style-type: none"> • Vibration and noise free chiller • Pumps
Documentation	Vendor should specify the model number of the XRF and accessories including optional items submit the brochure that supports all the quoted specifications
Warranty	Warranty (from the date of full installation and acceptance) for 5 years along with free software upgrades for the entire system including all the attachments
Operation & maintenance manuals	Hardcopy and Soft copy of the operation & maintenance manuals for the WD-XRF and all accessories and supporting peripheral equipment should be provided
Availability of spare parts and consumables	The vendor must guarantee that all the spare parts and consumable for the offered XRF and attachments will be available for at least next 10 years
Installation & training	Unpacking to the complete installation of the supplied INSTRUMENT system should be carried out by the factory engineers. All the expenses including travel, accommodation etc. (if any) towards this should be included in the quote. It is the responsibility of the vendor to ensure that all of the required accessories and

	<p>ancillary items are included in the quotation for carrying out the installation, standardization, optimization and calibration of the instrument. The supplied system should be complete in itself in all respect to take up the sample analysis at the IISc premises.</p> <p>It is the responsibly of the factory engineers to demonstrate all specifications quoted to the users before acceptance; this may not be considered as part of training.</p> <p>Training for 10 persons in the operation of the WD-XRF for 7 days. The cost of an on-site training session (if any) should be part of the quotation.</p>
Pre-installation requirement (civil& electrical EMI and gas, etc.)	Should be mentioned along with offer. Free survey of Pre-installation requirement on site and the results must be provide in advance for the necessary modifications (if required) for achieving best results
Specification	The technical specs listed above should be demonstrated on samples sent by us preferably in an installation within the country. The technical committee reserves the right to qualify/disqualify vendors based on data quality.
Optional	
Calibration standard samples	Standard samples to be provided or recommended
Sample	Liquid sample analytical setup with accessories.
Accessories	<ol style="list-style-type: none"> 1. UPS for 1 hour of back up. 2. Semi-automatic Pressed Pallet maker, 3. Fully automatic Fused Bead maker with 1 or more position and complete accessories.

Additional Requirements:

1. List of other installations in India with contact details of scientist / individual in-charge.
2. The technical specifications listed above are a minimum indicative. The ease of operation and maintenance, the ability to integrate latest technology, and after sales service facilities are some of the key factors in the evaluation process.
3. **The details, credentials, and experience of individuals who are factory trained service engineers of the quoted model of XRF and is currently on roll in India or at the nearest service hub should be submitted with the offered quotation.**
4. Quotation should include all cost including logistics required to complete the

- installation at IISc.
5. The Vendor should certify and confirm availability of spares, service support and, both hardware and software upgradation for at least 10 years from the year of installation.
 6. Any equipment of component procured locally and supplied with the instrument should be quoted in Indian Rupees.
 7. List of select user laboratories of an instrument of similar configuration and scientific application must be provided with the contact details (e-mail) of the person-in-charge of the instrument, model and date of installation.
 8. IISc may opt for demonstration of any technical specifications and performance of the quoted model on the samples provided by us, at any available user site in India or at the factory / preferred demonstration site for the company, as a part of technical evaluation.

Section 3–Terms and Conditions:

1. The tender document should be in English and be submitted in **two bid system, i.e., Technical bid, and Commercial bid in two sealed envelopes with commercial or technical bid clearly indicated on the envelope.** These two sealed envelopes should be placed within a larger sealed envelope.

Technical Bid (Part-A) – Technical bid consisting of all technical details and a checklist for conformance to technical specifications. The technical proposal should contain a technical compliance table with 5 columns.

- I. The first column must list the technical requirements in the order given in the technical requirement below.
- II. The second column should provide specifications of the instrument against the requirement. Please provide quantitative responses wherever possible.
- III. The third column should only describe your compliance with a "Yes" or "No". Ensure that the entries in column 2 and column 3 are consistent.
- IV. The fourth column should state the reasons/explanations/context for any deviations.
- V. The fifth column can contain additional remarks from the OEM. You can use this opportunity to highlight technical features, qualify response of previous columns, provide further details, compare your solution with your competitors or provide details as requested in the technical requirements table below. (Suppliers who include any indication of prices in the technical bid will be automatically disqualified).

Any additional capabilities or technical details, that you would like to bring to the attention of the purchase committee, can be listed at the end of the technical table.

2. The technical bid must include all details of technical specifications of the instrument along with commercial terms and conditions masking only the price component. Bill of materials, brochures, technical datasheets, and any other document may be enclosed to help the evaluation of the technical bid. Please also include warranty terms and any other information on upgradation terms/extra accessories in the technical bid.

3. The technical bid must clearly state the specifications of the main instrument (A) along with the accompanying standard items and all other details including the warranty terms (B-I) as specified in section 2 of this document

Commercial Bid (Part-B) –

- i. Indicating item wise price for the items mentioned in the technical bid, **as per the quotation format provided in tender**, and other commercial terms and conditions.
 - ii. As an option, please provide itemized cost for any suggested accessories/add-ons that may enhance the usability, capability, accuracy or reliability of the tool. Vendors are encouraged to quote for as many add-ons as their tool portfolio permits.
4. The commercial bid must include the base price of the instrument, optional additions plus all components including accessories, and taxes.
 5. The commercial bid must indicate detailed component-wise and itemized price breakup and must include optional items/accessories.
 6. Bidder should have well established own establishment. Enclose Company Registration Certificate, PAN, 3 years of audited balance sheets and turnover.
 7. In the technical bid include the complete details all components of the main instrument and the accessories as to whether they are sourced locally or foreign made/imported along with the manufacturer and sourcing details.
 8. The vendor should provide detailed cost breakup for the Indian and foreign content of the bid in the commercial bid.
 9. In case if there are any imported/foreign made components, the commercial bid must indicate procurement price from the manufacturer and any import duties incurred. IISc will not be responsible for any import duties.
 10. The vendor should have a good track record of having previously supplied similar equipment in India or elsewhere in the world (Please furnish complete details including names and contact addresses). Reference letters may be sought by the committee to arrive at the decision.
 11. The vendor should have qualified technical service personnel for the instrument based in Bengaluru.
 12. Bidder should have executed at least 5 order of similar or same instrument model in India in the last 2 years. (Please provide copy of purchase orders and details).
 13. The bidder should provide a list of national and international publication resulting from the data of the instrument.
 14. The Bidder should not be currently blacklisted by any institution, bank in India or abroad (Please provide self-declaration).
 15. Agency commission (not encouraged) if any should be clearly mentioned and detailed in the commercial bid.
 16. The lead time for the delivery of the equipment should be less than three months from the date of receipt of purchase order and must be mentioned in the technical bid.
 17. If the equipment or any parts/accessories are found to be defective, they must be replaced or rectified at the cost of the supplier within 30 days from the date of receipt of written communication from us. If there is any delay in replacement or rectification, the warranty period needs to be extended by a year and/or face a penalty equal to the valuation of the equipment.

18. The technical bid will be opened first and evaluated.
19. Bidders meeting the required criteria as stated in Sections 2 and 3, of this document as well as the terms and conditions shall only be considered for Commercial Bid opening. Further, agencies not furnishing the documentary evidence as required will not be considered.
20. Following the opening of technical bid, a presentation may be sought from the bidder.
21. During the warranty period, the bidder shall be fully responsible for the manufacturer's warranty in respect of proper design, quality, and workmanship of all the systems supplied. If there is any delay in replacement or rectification, the warranty period needs to be extended by a year and/or face a penalty equal to the valuation of the equipment.
22. During the warranty period, the bidder shall attend to all the hardware problems on site and shall replace the defective parts at no extra cost to the purchaser.
23. The bids should be valid for at least 180 days from the last date of submission of the quotation.
24. If the price is not quoted in the Commercial Bid as per the format provided in the tender document, the bid is liable to be rejected.
25. The vendor should have qualified technical service personnel for the equipment based in India and should assure a response time of <48 hours.
26. A technical evaluation by the purchase committee may include a demonstration to verify the functionalities and capabilities of the system quoted. The purchase committee reserves the right to reject the bids based on their technical evaluation of the quality of data, capability demonstration, and service. If the data/requested capability demonstration does not happen within a stipulated timeframe, the bid will be rejected. Any discrepancy between the promised specifications and measurements will be deemed as technical non-compliance. Imported items should be shipped on C.I.P. Bangalore basis (by Air Freight only), and all components and accessories indicate component-wise and itemized breakup. Provide certificates for the country of origin of manufacturing for each line item. The price of every line item in the commercial bid should be quoted along with the total quoted price for the instrument to be operational (installed and ready to use) in our facility.
27. The purchase committee, IISc, Bangalore reserves the right to accept or reject any bid and to annul the bidding process and reject all bids at any time before the award of contract, without thereby incurring any liability to the affected bidder or bidders or any obligation to inform the affected bidder or bidders.
28. The decision of the purchase committee will be final.
29. Tender documents that do not satisfy the "Terms and Conditions" listed herein will be disqualified.
30. Order will be placed on lowest bid from technically qualified vendor.
31. The bidder will provide the pre-requisite installation requirement of the equipment along with the technical bid.
32. All the attached annexures should be signed and enclosed with the technical and commercial bids
33. The tender documents should be sent to the following address no later than 26/June/2023 5:00 PM IST.

The Chair,
Purchase Committee,
Centre for Earth Sciences,
Indian Institute of Science,
Bangalore 560012,
Karnataka, India.

Cancellation of Tender:

Notwithstanding anything specified in this tender document, the IISc purchase committee, in its sole discretion, unconditionally and without having to assign any reason, reserves the rights:

1. To accept OR reject the lowest tender or any other tender or all the tenders.
2. To accept any tender in whole or in part.
3. To reject the tender, if it does not conform with the terms.

Warranty:

The complete system is to be under a warranty period of a minimum of 3 years (year-wise breakup value should be shown in the commercial bid) along with free software upgrades for the entire system including all the attachments. The vendor should include the cost of any spares that are expected to be needed during the warranty period, including electronics, subcomponents, and software. Vendors can assume usage of 2000 hours/year for this calculation. If the instrument is found to be defective, it has to be replaced or rectified at the bidder's cost within 30 days from the date of receipt of written communications from IISc, Bangalore. If there is any delay in replacement or rectification, the warranty period should be correspondingly extended. The cost for the extension of the warranty beyond three years should be mentioned separately, which is an optional item

Purchase Order:

1. The order will be placed on the bidder whose bid is accepted by IISc based on the terms & conditions mentioned in the tender document.
2. The quantity of the items in the tender reserves the right to increase /decrease the quantity of the items depending on the requirement.
3. If the quality of the product and service provided is not satisfactory, IISc, Bangalore reserves the right to cancel or amend the contract.

Delivery, Installation and Training

1. The bidder shall provide the lead time to delivery, installation and made functional at IISc, Bangalore, from the date of receipt of a purchase order.
2. The system should be delivered, installed and made operational within 03 months from receipt of the purchase order.
3. The supply of the items will be considered as effected only on satisfactory installation and inspection of the system and inspection of all the items and features/capabilities tested by the IISc, Bangalore.
4. After successful installation, the handover date shall be the start of the warranty period.
5. No partial shipment is allowed.

6. The bidder should provide onsite application training for the local facility technologists and users.

Payment Terms:

The payment will be through a Letter of Credit and the milestone of the payment will be determined after mutual discussions with the successful bidder.

Statutory Variation

Any statutory increase in the taxes and duties subsequent to bidder's offer, if it takes place within the original contractual delivery date, will be borne by IISc, Bangalore subject to the claim being supported by documentary evidence. However, if any decrease takes place the advantage will have to be passed on to IISc, Bangalore.

Disputes and Jurisdiction

Any legal disputes arising out of any breach of contract pertaining to this tender shall be settled in the court of competent jurisdiction located within the city of Bangalore, India.

Other:

1. All amendments, time extension, clarifications etc., within the period of submission of the tender will be communicated electronically. No extension in the bid due date/time shall be considered on account of delay in receipt of any document(s) by mail.
2. The bidder may furnish any additional information, which is necessary to establish capabilities to successfully complete the envisaged work. It is however, advised not to furnish superfluous information.
3. The bidder may visit the installation site before submission of tender, with prior intimation.
4. Any information furnished by the bidder found to be incorrect, either immediately or at a later date, would render the bidder liable to be debarred from tendering/taking up of work in IISc, Bangalore.

Annexure-1:

Details of the Bidder

The bidder must provide the following mandatory information & attach supporting documents wherever mentioned:

Details of the Bidder

Sl. No	Items	Details
1.	Name of the Bidder	
2.	Nature of Bidder (Attach attested copy of Certificate of Incorporation/ Partnership Deed)	
3.	Registration No/ Trade License, (attach attested copy)	
4.	Registered Office Address	
5.	Address for communication	
6.	Contact person- Name and Designation	
7.	Telephone No	
8.	Email ID	
9.	Website	
10.	PAN No. (attach copy)	
11.	GST No. (attach copy)	

Signature of the Bidder

Name
Designation, Seal

Date:

Annexure-2:

Declaration regarding experience

To,
The Chair,
Purchase Committee,
Centre for Earth Sciences,
Indian Institute of Science,
Bangalore 560012,
Karnataka, India.

Ref: Tender No: XXXXXXXXXX

Dated: XXXXX

Supply and installation of Wavelength Dispersive X-ray Florescence Spectrometer (WD-XRF) at Centre for Earth Sciences, IISc Bangalore

Sir,

I've carefully gone through the Terms & Conditions contained in the above referred tender. I hereby declare that my company / firm has ---- years of experience in supplying and installing Wavelength Dispersive X-ray Florescence Spectrometer (WD-XRF).

(Signature of the Bidder)

Printed Name

Designation,

Seal

Date:

Annexure-3:

Declaration regarding track record

To,
The Chair,
Purchase Committee,
Centre for Earth Sciences,
Indian Institute of Science,
Bangalore 560012,
Karnataka, India.

Ref: Tender No: XXXXXXXX
Dated: XXXXX

Supply and installation of Wavelength Dispersive X-ray Florescence Spectrometer (WD-XRF) at Centre for Earth Sciences, IISc Bangalore

Sir,
I've carefully gone through the Terms & Conditions contained in the above referred tender. I hereby declare that my company/ firm is not currently debarred / blacklisted by any Government / Semi Government organizations / institutions in India or abroad. I further certify that I'm competent officer in my company / firm to make this declaration.

Or

I declare the following

Sl.No	Country in which the company is Debarred /blacklisted / case is Pending	Blacklisted / debarred by Government / Semi Government/Organizations /Institutions	Reason	Since when and for how long

(NOTE: In case the company / firm was blacklisted previously, please provide the details regarding period for which the company / firm was blacklisted and the reason/s for the same).

Yours faithfully
(Signature of the Bidder)

Name
Designation,
Seal

Date:

Annexure – 4:

Declaration for acceptance of terms and conditions

To,
The Chair,
Purchase Committee,
Centre for Earth Sciences,
Indian Institute of Science,
Bangalore 560012,
Karnataka, India.

Ref: Tender No: XXXXXX
Dated: XXXX

Supply and installation of Wavelength Dispersive X-ray Florescence Spectrometer (WD-XRF) at Centre for Earth Sciences, IISc Bangalore
Sir,

I've carefully gone through the Terms & Conditions as mentioned in the above referred tender document. I declare that all the provisions of this tender document are acceptable to my company. I further certify that I'm an authorized signatory of my company and am, therefore, competent to make this declaration.

Yours faithfully,

(Signature of the Bidder)
Name
Designation,
Seal

Date:

Annexure – 5:

Details of items quoted:

2. Company Name
3. Product Name
4. Part / Catalogue number
5. Product description / main features
6. Detailed technical specifications
7. Remarks

Instructions to bidders:

1. Bidder should provide technical specifications of the quoted product/s in detail.
2. Bidder should attach product brochures along with technical bid.
3. Bidders should clearly indicate compliance or non-compliance of the technical specifications provided in the tender document.

Annexure-6 – Commercial Bid

The commercial bid should be furnished with all requirements of the tender with supporting documents as mentioned under:

S.No	Description	Cat. Number	Quantity	Unit Price	Sub total
1.	Essential items noted in the technical specification				
1.a	... (details of essential items)				
1.b	...				
2.	Optional items noted in the technical specification				
2.a	... (details of essential items)				
2.b	...				
3.	Accessories for operation and installation				
4.	All Consumables, spares and software to be supplied locally				
5.	Warranty (3 years)				
6.	AMC 2 years beyond warranty				
7.	Cost of Insurance and Airfreight				
8.	CIP/CIF-IISc Bangalore				

Any additional items

S.No	Description	Cat. Number	Quantity	Unit Price	Sub total

Addressed to
The Chair,
Purchase Committee,
Centre for Earth Sciences,
Indian Institute of Science,
Bangalore 560012,
Karnataka, India.

Annexure-7 – Checklist

(This should be enclosed with technical bid- Part A)

The following items must be checked before the Bid is submitted:

1. Sealed Envelope “A”: Technical Bid

- 4. Section 5- Technical Bid (each page signed by the authorized signatory and sealed) with the below annexures:**
 - a. Annexure 1: Bidders details**
 - b. Annexure 2: Declaration regarding experience**
 - c. Annexure 3: Declaration regarding clean track record**
 - d. Annexure 4: Declaration for acceptance of terms and conditions**
 - e. Annexure 5: Details of items quoted**
- 5. Copy of this tender document duly signed by the authorized signatory on every page and sealed.**

2. Sealed Envelop “B”: Commercial Bid

Section 6: Commercial Bid

Your quotation must be submitted in two envelopes: **Technical Bid (Envelope A) and Commercial Bid (Envelope B)** super scribing on both the envelopes with Tender No. and due date and both of these in sealed covers and put in a bigger cover which should also be sealed and duly super scribed with Tender No., Tender description & Due Date.