

Tender Notification for the procurement of a " X-ray powder diffractometer with provision for stress and texture measurements and analysis" at IISc, Bangalore
(Last Date for submission of tenders: 14th September 2018)

Dear Sir/Madam,

Kindly send your best quotation for the following item on C.I.P. Bangalore basis. Your quotation should clearly indicate the terms of delivery, delivery schedule, E.D., payment terms etc. The tender should be submitted in two separate sealed envelopes - one containing the technical bid and the other containing the commercial bid, both of which should reach us, duly signed on or before 1700 hours 14th September, 2018.

Please enclose a compliance certificate along with the technical bid.

Please submit your quotations separately

- (i) with a buy back option for our existing "X-ray powder diffractometer, "X'Pert Pro" Model, PANalytical make equipped with "X-Celerator" detector. This machine was procured in the year 2006 and is currently in fully operational condition.
- (ii) Without the buy-back option.

Important: We already have a HTK1200N model (Anton Par make) high temperature attachment which works with the current machine, "X'Pert Pro" Model, PANalytical make. We do not intend to sell this attachment. Your new machine should be capable performing high temperature XRD using our HTK1200N model (Anton Par make) high temperature attachment.

Detailed technical specifications for " x-ray powder diffractometer with Option for Stress and Texture measurements"

1. State of the art X-ray generator (~ 3kW) operating with voltages in the range 10-60kV and filament current between 10-60 mA.
2. X-ray (Cu) long fine focus high resolution for Rietveld applications.
3. Variable slits with automatic alignments for parallel beam and focusing beam arrangement

4. State of the art solid state detector with 0D, 1D and 2D options. The detector should be able to perform measurement using Cu and Co x-ray sources with nearly 100 % efficiency.
5. Provision to perform reflection and grazing incidence XRD measurements
6. Provision for Stress-texture measurements and analysis.
7. Standard vertical goniometer ($\theta - 2\theta$ or $\theta-\theta$) geometry compatible with our existing HTK1200N model (Anton Par make) high temperature attachment. The machine should be able to perform high temperature XRD measurements using our attachment.
8. All essential standard software for performing normal powder XRD, variable temperature diffraction measurements of samples in the form of powders, pellets and thin films.
9. Computer facility for data collection and analysis
10. 2 years warranty with parts
11. Annual maintenance contract for three years beyond the warranty period as an optional
12. Necessary spares stock including X-ray tube and other important accessories.
13. Components from Indian sources (Optional)
 - (a) Chiller for water cooled sources
 - (b) Appropriate kVA UPS (with minimum 1 hour back up time)

Compliance statement to be enclosed with the technical bid.

Specifications	Comply	Non-comply	Deviation from the specifications	Remarks
(a) 3kW x-ray (Cu) tube				
(b) ($\theta - 2\theta$ or $\theta-\theta$) goniometer compatible with our existing high temperature HTK1200N attachment				
(c) Variable slits with automatic alignments for parallel beam and focusing beam arrangement. Very high peak to background count (specify number)				
(d) State of the art detector with 0D and 1D				
(e) Detector capable of doing measurements with Cu and Co sources with ~ 100 % efficiency				
(f) Provisions to perform Grazing incidence				

<p>diffraction</p> <p>(g) Provision to perform stress-texture measurement</p> <p>(h) Essential standard software for performing normal XRD, temperature dependent XRD, grazing angle and stress-texture measurements</p> <p>(i) Diffractometer capable of using our existing high temperature attachment HTK1200N (Anton Par Make) for high temperature diffraction measurements .</p> <p>(j) Necessary spares stock including X-ray tube and accessories</p> <p>(k) 2 Years warranty with parts</p> <p>(l) Chiller for water cooled sources*</p>					
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<p>(m) Appropriate kVA UPS with 1 hour back up for the entire system>(* these items may be separately quoted in INR)</p> <p>(n) AMC for 3 years beyond the warranty period</p>					
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The compliance statement should be supported with brochures, charts etc.,and relevant portions should be highlighted.

TERMS AND CONDITIONS FOR SUBMISSION OF BIDS

1.The quotations should be submitted in TWO bid system i.e., the Technical bid and the Commercial bid.

The Technical bid must include all the details of technical specifications of the equipment along with commercial terms and conditions, **however, without the price component**. The bill of materials, printed technical brochure and any other documents to help the technical evaluation of the bid may be enclosed.

The vendor should have a **very good track record** of having previously supplied similar equipment in similar educational institutions in India should be able to provide service as and when required. Please provide the list of customers in reputed public Institutions (such as IITs, IISc, and other reputed R& D Centers)

The vendor should have qualified technical service personnel for the equipment based in India, **preferably in Bangalore**.

2. The commercial bid must include the price of the item(s) in Indian/Foreign currency indicating the breakup of

a) For Goods manufactured within India

(i) The price of the goods quoted Ex-works including taxes already paid.

(ii) GST and other taxes like excise duty etc. which will be payable on the goods if the contract is awarded.

(iii) The charges for inland transportation, insurance and other local services required for delivering the goods to IISc, Bangalore.

(iv) The installation, commissioning and training charges including any incidental services, if any.

(b) For Goods manufactured abroad

(i) The price of the goods @ CIF Bangalore.

(iv) The installation, commissioning and training charges including any incidental services, if any.

Important : IISc reserves the right to choose the L1 based on the price quoted with buy back or without buy back based on the technical compliance and funds available. In case any vendor quotes without any buy-back option then the price quoted for "without buy back" will be considered as the price "with buy-back" for comparison purpose.

Both the Technical and Commercial bid addressed to

Chairman,

Department of Materials Engineering

Indian Institute of Science Bangalore-560012

should be put in separate sealed envelopes and both the envelopes should be put in another cover superscribing the " quotation for x-ray powder diffractometer with Option for Stress and Texture measurements with accessories"

and should reach

Prof. Subodh Kumar

Department of Materials Engineering

Indian Institute of Science Bangalore-560012

on or before September 14, 2018 (before 5.00 PM)

3. We prefer to make payment by Letter of Credit - 90% against presentation of documents and 10% after installation. All Foreign Bank Charges if any, should be borne by the Beneficiary. In addition to this, LC Amendments, Extension, Confirmation charges if required to be borne by the beneficiary.

For Supplies within India, the payment term is after supply and satisfactory acceptance.

5. Please indicate the import code of the items.

6. If the goods are found to be defective, they have to be replaced / rectified at the cost of the supplier within 15 days from the date of receipt of written communication from us. If there is any delay in replacement / rectification, the warranty period should be correspondingly extended.

7. The terms FOB, FCA, CIF, CIP, etc., shall be governed by the rules prescribed in the current edition of the Incoterms published by the International Chambers of Commerce, Paris.

8. The purchases made by the purchaser for scientific purpose are exempt from Custom Duty at a concessional rate is leviable.

9. Conditional tenders shall not be accepted.

10. Bids shall remain valid for minimum of 90 days after the date of bid opening prescribed by the Purchaser.

11. The Purchaser reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to award of Contract, without thereby incurring any liability to the affected Bidder or Bidders.