

INVITATION FOR TENDER FOR SUPPLY OF EQUIPMENT

Sealed tender offers are invited in two separate sealed covers (Technical and Commercial offers) from eligible manufacturers/suppliers or their direct Indian agents for the supply of the following equipment.

Table Top X-ray diffractometer

Please send offers, ALONG WITH DESCRIPTIVE CATALOGUE/ BROCHURE. The validity of the bid should be at least four months (120 days) or more from the date of the opening of this tender. Please ensure that your quotation reaches not later than ~~28.05.2018 at 17:00 Hrs~~ ~~Extended to 20.06.2018 (Wednesday) by 17:00 Hrs (Indian time)~~ **Extended to 26.07.2018 (Thursday) by 17:00 Hrs (Indian time)** at the following address:

**Professor-in-Charge,
DHI Centre of Excellence on Advanced Manufacturing Technology,
(Inside Steel Technology Centre),
Indian Institute of Technology Kharagpur,
721 302, West Bengal, India**

Earnest money of **Rs. 60,000/-** is to be deposited in the form of Account Payee Demand Draft in favour of IIT Kharagpur, payable at Kharagpur, India. Any bid which is not accompanied with an EMD shall be summarily rejected. Earnest money deposited will be forfeited if the tenderer withdraws or amends its tender or impairs or derogates from the tender in any respect within the period of validity of its tender. No interest will be paid on the earnest money of the unsuccessful bidders.

Tender Reference	IIT/SRIC/CoE_AMT/DHI/2018/EQ12, dated 07/05/2018
Tender Fee	Rs. 5000/- (Account payee Demand Draft in favour of IIT Kharagpur, payable at Kharagpur, India); Non-refundable
Last Date and Time for submitting the tender document	28.05.2018 (Monday) at 17:00 Hrs (Indian time) Extended to 20.06.2018 (Wednesday) at 17:00 Hrs (Indian time) Extended to 26.07.2018 (Thursday) at 17:00 Hrs (Indian time)
Time and Date of Opening of Technical Bids	29.05.2018 (Tuesday) at 11:30 Hrs (Indian time) Extended to 21.06.2018 (Thursday) at 11:30 Hrs (Indian time) Extended to 27.07.2018 (Friday) at 11:30 Hrs (Indian time)
Place of Opening Tender	SRIC Meeting Room, Indian Institute of Technology Kharagpur, 721 302, West Bengal, India
Address of Communication	Office of Professor-in-Charge, DHI Centre of Excellence on Advanced Manufacturing Technology, (Inside Steel Technology Centre), Indian Institute of Technology Kharagpur, 721 302, West Bengal, India
Contact Telephone Numbers	+91- 3222 - 281576
E-mail	coeamt@iitkgp.ac.in

Technical Specification of Table Top X-ray diffractometer

SL No	Parameter(s)	Specification of IIT Kharagpur
1	Table top X-ray diffractometer	The unit must be a state-of-the-art, easy to use, versatile, and compact, along with the following technical specifications as given below. All the below-mentioned technical specifications must be supported by original technical brochure, datasheet, documents as well as should be available in the manufacturer's official website.
2	Instrument type	Plug and play type portable table top model
3	Geometry	Bragg–Brentano
4	Goniometer scanning range (2θ)	-3 to 145° or better
5	Goniometer scanning speed (2θ)	0.01 to 100°/min or better
6	Goniometer minimum step width (2θ)	0.005° or better
7	Accuracy	$\pm 0.02^\circ$ or better throughout the entire measuring range
8	Optics/ slits	Fixed divergence slits of 0.1mm, 0.2mm, 0.6mm and fixed anti-scattering slit(s), and suitable K_β filter(s) should be supplied.
9	X-ray tube	Standard ceramic seal tube of One (1 no) copper tube and one (1 no.) cobalt tube should be supplied.
10	X-ray generation	Maximum allowable power of 300W, Tube voltage of 30kV and 10 A
11	Detectors	Maintenance free and solid-state fast detector should be provided. No scintillation counter is allowed.
12	Automatic sample changer	Minimum 6 position sample changer preferably with sample rotation facility and with sample holders/rings
13	Exterior Dimension	Smaller than 70 cm X 70 cm X 70 cm
14	Weight	The net weight of the device should be lower than 100 kg
15	Power supply	100 to 240 VAC , 50-60 Hz ; with suitable power plug for India
16	External cooling supply	The instrument should be operated without any external cooling facility/ chiller.
17	Computer	Suitable PC should be supplied for data acquisition if necessary.
18	Software	Data acquisition and convenient interpretation of x-ray powder diffraction data for phase identification and quantitative analysis
19	Accessories	Specimen holders (10 numbers) and should be quoted separately
20	Safety	The instrument should include safety devices for protection against vacuum, water, power etc.. The instrument should be compliant with international norms for safety and environment. Radiation level of the equipment should be lower than 1 μ Sv/h.
21	Spares and consumables	List of standard spares and consumables should be quoted separately for smooth running of the device for 3 years.
22	Test certificates and reports	(i) Original manufacturer certificates, Warranty, date and place of manufacturing. (ii) Materials Test Certificate
23	Required documents	All the documents should be in English.

	with technical bids	<p>Minimum ten (10) end user certificates after successful installation from internationally reputed organizations stating the performance of the device and after sales service.</p> <p>Upon placement of order, supplier has to submit the necessary drawings and details for the housing/equipment foundation and other utilities. Detailed procedure of all the inspections/tests to be carried out on the equipment should be furnished.</p> <p>Along with the equipment supply, the manufacturer has to send three sets of documents comprising of operations, maintenance and service manuals, and fabrication drawings for the equipment, catalogues, specification test certificates and operation manuals for all the bought out items.</p> <p>Manufacturer should maintain the guarantee/warranty of all the bought out items and factory acceptance reports. Manufacturer should provide electrical/electronic schematics/ diagrams of the panel/console and electronic circuits for troubleshooting.</p>
24	Installations and commissioning	<p>The equipment should be installed by the manufacturer at user's site. On completion of commissioning, the performance of the equipment should again be demonstrated by the manufacturer as per accepted technical specifications.</p> <p>The manufacturer should supply and specify the pre-installation requirements i.e., necessary drawings, layouts for the building/ equipment foundation and Electrical lines for the complete system.</p> <p>The required site preparation and utilities like power, water, gas, etc. shall be arranged by user as per requirements of the equipment. Minimum of 10 runs/trials shall be demonstrated after completion of commissioning at user's site as per the process parameters given by user. All the interconnecting cables, cables from equipment to main panel are in vendor's scope.</p>
25	Warranty	<p>The equipment should be covered under comprehensive warranty for a period of 36 months from the date of satisfactory commissioning at user's site. During the period, any defective part should be replaced free of charge. Manufacturer shall maintain warranty of all the bought out items.</p>
26	Other terms and conditions	<p>The above mentioned details are based on the broad functional requirements. The manufacturer should give detailed specifications and provide break-ups for all the subsystems.</p> <p>The supplier should submit detailed offer including elaborate specifications of the main system and subsystems along with respective trade literature from the subcontractor. The supplier should also submit schematic of the main system and subsystems along with the detailed technical leaflet/photographs of the systems already supplied by them to other customers.</p> <p>The manufacturer should agree and provide an undertaking that the vendor will supply all the spares and will extend the technical support to user on improvements/up gradations of the system, for a period of minimum 10 years from the date of installation and commissioning at the user's site.</p>

GENERAL TERMS & CONDITIONS

PLEASE SPECIFICALLY INDICATE THE FOLLOWING POINTS IN YOUR QUOTATIONS AND COMPLY THE TERMS AS MENTIONED HEREUNDER: -

1. TENDERS ARE INVITED COMPLYING THE REQUIREMENT FOR TENDER AS DETAILED IN THE TENDER SPECIFICATION TO BE SUBMITTED IN THE COMPANY'S / FIRM'S LETTERHEAD NEATLY PRINTED / TYPED DULY SIGNED BY AUTHORIZED PERSON WITH THE SEAL OF THE BIDDERS. ALL ENVELOPES CONTAINING THE TENDER SHOULD BE PROPERLY SEALED. SEPARATE ENVELOPS SHOULD BE USED FOR TECHNICAL AND PRICE BID AND INDICATION TO THEIR EFFECT MAY PLEASE BE SUPERSCRIBED ON THE ENVELOPE.

THE FOLLOWING DOCUMENTS ARE REQUIRED FROM THE INDIAN AGENTS OF FOREIGN FIRMS:

- 1.1 FOREIGN PRINCIPAL'S PROFORMA INVOICE INDICATING THE COMMISSION PAYABLE TO THE INDIAN AGENT AND NATURE OF AFTER SALES SERVICE TO BE RENDERED BY THE INDIAN AGENT.
- 1.2 COPY OF THE AGENCY AGREEMENT WITH THE FOREIGN PRINCIPAL INDICATING THE NATURE OF AFTER SALES SERVICES, PRECISE RELATIONSHIP BETWEEN THEM AND THEIR MUTUAL INTEREST IN THE BUSINESS.
2. TECHNICAL CATALOGUE/LEAFLET SHOULD BE ENCLOSED WITHOUT FAIL. PROVIDE COMPLIANCE STATEMENT WITH RESPECT TO THE TECHNICAL SPECIFICATIONS MENTIONED ABOVE.
3. PLEASE CONFIRM WHETHER YOU ARE AUTHORISED TO QUOTE ON BEHALF OF YOUR PRINCIPALS AND IF SO, PLEASE ENCLOSE A COPY OF SUCH AUTHORISATION WITH YOUR QUOTATION.
4. **PRICE BIDS FOR FOREIGN FIRMS:** PRICES ARE TO BE QUOTED ON 'EX-WORKS' DULY PACKED OR ON "FCA/FOB" INTERNATIONAL PORT" BASIS AND ALSO INCLUDING AGENCY COMMISSION PAYABLE TO YOUR INDIAN AGENTS, IF ANY, SHOWING CLEARLY THE FOLLOWING BREAK UP:-
 - I) EX-WORKS PRICE
 - II) PACKING & FORWARDING
 - III) FREIGHT
 - IV) ANY OTHER RELEVANT EXPENSES.
 - V) TAXES PAYABLE BY THE INSTITUTE

INSURANCE WILL BE PAID BY OUR INSTITUTE SEPARATELY AND SHOULD NOT FORM PART OF THE QUOTED PRICE.

PRICE BIDS FOR INDIAN FIRMS: PRICES ARE TO BE QUOTED ON F.O.R., IIT KHARAGPUR, ON DOOR DELIVERY BASIS CLEARLY SHOWING THE BREAK UP.

5. **PERIOD OF VALIDITY:** BIDS SHALL REMAIN VALID FOR ACCEPTANCE FOR A PERIOD OF 120 DAYS FROM THE DATE OF OPENING.
6. INDIAN AGENTS ADDRESS AND PERCENTAGE OF AGENCY COMMISSION INCLUDED IN ABOVE F.O.B./EX-WORKS PRICE. (THIS WILL BE PAID TO THE INDIAN AGENTS IN INDIAN RUPEES ONLY AND NOT IN **FE**). PLEASE ENCLOSE COPY OF AGENCY AGREEMENT ENTERED INTO WITH YOUR PRINCIPALS INDICATING THE NATURE OF AFTER SALES SERVICES OF INDIAN AGENTS, PRECISE RELATIONSHIP & MUTUAL INTEREST IN THE BUSINESS.
7. **MEASUREMENTS/WEIGHT:** NETT/GROSS OF THE CONSIGNMENT. IN CASE OF AN ORDER,
YOU SHALL USE AIR WORTHY PACKAGE (AS APPLICABLE) DULY CERTIFIED WITH DOCUMENTS – PLYTO – SANITARY CERTIFICATE (AS PER QUARANTINE ORDER 2003).
8. **SCOPE OF SUPPLY:** SHOULD INCLUDE FREE INSTALLATION AND COMMISSIONING
9. **PAYMENT TERMS FOR FOREIGN FIRMS**

The offer will be made on a single currency and only one PO will be issued for the entire scope of the supply.

- A) 90% PAYMENT THROUGH SIGHTDRAFT/FOREIGN DEMAND DRAFT/LC (EXCEPTIONAL CASES)/SWIFT TELE TRANSFER AFTER RECEIPT OF STORE IN GOOD ORDER AND CONDITION AND 10% AFTER SUCCESSFUL INSTALLATION & COMMISSIONING.
- B) BANK CHARGES ON LC/SD (WITHIN INDIA APPLICANT ACCOUNT AND OUTSIDE INDIA TO BENEFICIARY ACCOUNT).

PAYMENT TERMS FOR INDIAN FIRMS

- A) 100% PAYMENT THROUGH CROSSED ACCOUNT PAYEE CHEQUE / ELECTRONIC TRANSFER AFTER RECEIPT OF STORE IN GOOD ORDER & CONDITION AND SUCCESSFUL INSTALLATION & COMMISSIONING.
- B) ENSURE MENTIONING
 - i) BANK DETAILS OF THE BENEFICIARY, GST NO. AND PAN NUMBER
 - ii) FULL NAME AND ADDRESS OF THE BENEFICIARY ON WHOM ORDER HAS TO BE PLACED
10. WHETHER ANY EXPORT LICENCE IS REQUIRED FROM YOUR GOVERNMENT, IF SO, PLEASE CONFIRM WITH DETAILS.
11. COUNTRY OF ORIGIN OF THE GOODS IS TO BE MENTIONED.

12. THE INSTITUTE SHALL PROVIDE THE CONCESSIONAL CUSTOMS DUTY AND EXCISE DUTY EXEMPTION CERTIFICATE AS PER GOVT. NOTIFICATION NO. 51/96 CUSTOMS DATED: 23.07.1996 AND CENTRAL EXCISE DUTY EXEMPTION IN TERMS OF GOVT. NOTIFICATION NO.
10/97 – CENTRAL EXCISE DATED: 01.03.1997 AS AMENDED FROM TIME TO TIME.
13. **LIQUIDATED DAMAGES:** THE STORES SHOULD BE DELIVERED/ DISPATCHED TO DESTINATION AND READY FOR OPERATION NOT LATER THAN THE DELIVERY DATE SPECIFIED. IF THE SUPPLIER FAILS TO DELIVER ANY OR ALL THE STORES OR PERFORM THE SERVICE BY THE SPECIFIED DATE, LIQUIDATED DAMAGES AT 1% PER MONTH OR PART THEREOF IN RESPECT OF THE VALUE OF STORES WILL BE DEDUCTED FROM THE CONTRACT PRICE SUBJECT TO A MAXIMUM OF 5%. ALTERNATIVELY, THE ORDER WILL BE CANCELLED AND THE UNDELIVERED STORES PURCHASED FROM ELSEWHERE AT THE RISK AND EXPENSE OF SUPPLIER.
14. **PATENT RIGHTS:** THE SUPPLIER SHALL INDEMNIFY THE PURCHASE AGAINST ALL THIRD PARTY CLAIMS OF INFRINGEMENT OF PATENT, TRADEMARK OR INDUSTRIAL DESIGN RIGHTS ARISING FROM USE OF THE GOODS OR ANY PART THEREOF IN INDIA.
15. ONLY THOSE BIDDERS WHO'S BIDS HAVE BEEN TECHNICALLY FOUND ACCEPTABLE WILL ONLY BE INVITED FOR PARTICIPATION IN THE PRICE BID.
16. THOSE BIDDERS WHO DO NOT RECEIVE ANY COMMUNICATION FOR PARTICIPATION IN PRICE BID OPENING MEETING MAY PRESUME THAT THEIR BID HAS NOT BEEN ACCEPTED BY THE INSTITUTE.
17. CONDITIONAL OFFER WILL NOT BE ACCEPTED.
18. LATE TENDERS I.E. TENDER RECEIVED AFTER THE DUE DATE AND TIME OF SUBMISSION AS MENTIONED ABOVE SHALL NOT BE ACCEPTED.
19. BIDDERS TO ENCLOSE THE FOLLOWING DOCUMENTS:-
 - A) INCOME TAX RETURN (3 YRS) AND LATEST SALES TAX RETURN (GST No.), AND PAN NO.
 - B) BANKER'S SOLVENCY CERTIFICATE
 - C) SUMMARY OF AUDITED STATEMENT OF ACCOUNTS FOR THE LAST THREE YEARS TO BE ENCLOSED AND FINANCIAL HIGHLIGHTS AND THE KEY PERFORMANCE DURING THE LAST THREE QUARTERS TO BE ENCLOSED AS PER FORMAT:-

COMPANY'S KEY PERFORMANCE

DESCRIPTION	JAN. TO MARCH	APRIL TO JUNE	JULY TO SEPT.
GROSS REVENUE			
PROFIT BEFORE TAX			
PROFIT AFTER TAX			
RETURN ON INVESTED			
CAPITAL (ROIC)			

D) CUSTOMER SATISFACTION CERTIFICATE FROM ONE SUCH ORGANIZATION IS TO BE ATTACHED WITH THE TECHNICAL BID AND PRICE BID.

E) NAME AND ADDRESS OF MINIMUM THREE CLIENTS TO WHOM SUCH EQUIPMENT HAVE BEEN SUPPLIED SHOULD BE MENTIONED.

20. **WARRANTY/ GUARANTEE:** THIS COMPREHENSIVE WARRANTY/ GUARANTEE SHALL REMAIN VALID FOR **36 MONTHS** AFTER THE GOODS (OR ANY PORTION THEREOF AS THE CASE MAY BE) HAVE BEEN DELIVERED AND COMMISSIONED TO THE FINAL DESTINATION.

21. THE INSTITUTE DOES NOT BIND ITSELF TO OFFER ANY EXPLANATION TO THOSE BIDDERS WHO'S TECHNICAL BID HAS NOT BEEN FOUND ACCEPTABLE BY THE EVALUATION COMMITTEE OF THE INSTITUTE.

22. ALL TENDERS (UNLESS OTHERWISE SPECIFIED) ARE TO BE SUBMITTED / HANDED OVER TO

**Office of Professor-in-Charge,
DHI Centre of Excellence on Advanced Manufacturing Technology,
(Inside Steel Technology Centre),
Indian Institute of Technology Kharagpur,
721 302, West Bengal, India**

AND ACKNOWLEDGEMENT TO BE OBTAINED.

IMPORTANT

1. IIT Kharagpur authority may accept or reject any or all the bids in part or in full without assigning any reason and does not bind itself to accept the lowest bid. The Institute at its discretion may change the quantity/ upgrade the criteria/ drop any item or part thereof at any time before placing the Purchase Order.
2. Promptly make arrangements for repair and/ or replacement of any damaged item (s) irrespective of settlement of claim.
3. In case of any dispute, the decision of the Institute authority shall be final and binding on the bidders.
4. For any query pertaining to this bid document correspondence may be addressed to
Professor-in-Charge,
DHI Centre of Excellence on Advanced Manufacturing Technology,
(Inside Steel Technology Centre),
Indian Institute of Technology Kharagpur 721 302,
West Bengal, India
E-mail: coeamt@iitkgp.ac.in

LAST DATE FOR SUBMISSION OF SEALED BIDS: ~~28.05.2018 at 17:00 Hrs (Indian time)~~ Extended to 20.06.2018 (Wednesday) at 17:00 Hrs (Indian time) Extended to 26.07.2018 (Thursday) at 17:00 Hrs (Indian time)

- 1) Please Note that the Institute remains closed during Saturdays & Sundays and all specified government holidays.
- 2) Fax, e-mail Tender will not be accepted.
- 3) The General Terms and Conditions as stated above relate to supply of stores/ equipment/ assets etc. and for specific service other terms and conditions of the Institute will apply.
