

	<p>भारतीय प्रौद्योगिकीसंस्थानमद्रासचेन्ने 600 036 INDIAN INSTITUTE OF TECHNOLOGY MADRAS Chennai 600 036 भंडार एवं क्रय अनुभाग STORES & PURCHASE SECTION Email: adstores@iitm.ac.in दूरभाष: (044) 2257 8285 / 8287 / 8288 / 8290 फ़ैक्स: (044) 2257 8082 Telephone : (044) 2257 8285/8287/8288/8290 FAX: (044) 2257 8082 GSTIN: 33AAAAI3615G1Z6</p>	
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P.K. SHEBA SABARI
Assistant Registrar (Stores & Purchase)

Date: 26.02.2024

Tender No. IITM/SPS/SC-XRD/038/GTE/2023-24/SPL

Due Date 04.03.2024
Before 02.00 p.m.

Dear Sirs,

On behalf of the Indian Institute of Technology Madras, Tenders are invited in two bid system, namely technical and financial bids for:

SUPPLY OF SINGLE CRYSTAL X-RAY DIFFRACTOMETER – 1 No.

Conforming to the specifications enclosed.

Tender Documents may be downloaded from Central Public Procurement Portal <https://etenders.gov.in/eprocure/app>. Aspiring Bidders who have not enrolled / registered in e-procurement should enroll/register before participating through the website <https://etenders.gov.in/eprocure/app>. The portal enrolment is free of cost. Bidders are advised to go through instructions provided at "Help for contractors". [Special instructions to the bidders for the e-submission of the bids online through this e-Procurement Portal"].

Tenderers can access tender documents on the website (For searching in the NIC site, kindly go to Tender Search option and type 'IIT'. Thereafter, Click on "GO" button to view all IIT Madras tenders). Select the appropriate tender and fill them with all relevant information and submit the completed tender document online on the website <https://etenders.gov.in/eprocure/app> as per the schedule attached.

No manual bids will be accepted. All tender documents including Bidder Eligibility Criteria, Technical and Financial bids should be submitted in the E-procurement portal.

1	<p>LAST DATE for receipt of Tender : 04.03.2024 before 02.00 p.m.</p> <p>Date & Time of opening of Tender : 05.03.2024 @ 03.00 p.m.</p>
GUIDELINES FOR TENDER SUBMISSION IN CENTRAL PUBLIC PROCUREMENT PORTAL (E-PROCUREMENT MODE)	
A	<p>निविदा की प्रस्तुति /Submission of Tender :</p> <ul style="list-style-type: none"> As per the directives of Department of Expenditure, this tender document has been published on the Central Public Procurement Portal URL: https://etenders.gov.in/eprocure/app The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal More information useful for submitting online bids on the CPP Portal may be obtained at: https://etenders.gov.in/eprocure/app All tender documents including Technical Bid & Financial Bid should be submitted separately in online CPP portal as per the specified format only. Right is reserved to ignore any tender which fails to comply with the above instructions. No manual bid submission will be entertained.

B	ऑनलाइन बोली जमा के अनुदेश / Instructions for online bid submission	: REGISTRATION <ul style="list-style-type: none"> • Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal URL: https://etenders.gov.in/eprocure/app by clicking on “Online Bidder Enrollment”. Enrolment on the CPP Portal is free of charge. • As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts. • Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal. • Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g.Sify/TCS/nCode/eMudhra and etc.)https://eprocure.gov.in/eprocure/app with their profile. • Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSCs to others which may lead to misuse. • Bidder then may log in to the site through the secured log-in by entering their user ID / password and the password of the DSC / eToken.
C	निविदा दस्तावेज़ की खोज / Searching for tender documents	: <ul style="list-style-type: none"> • There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, organization name, location, date, value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as organization name, form of contract, location, date, other keywords etc. to search for a tender published on the CPP Portal. • Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective “My Tender” folder. This would enable the CPP Portal to intimate the bidders through SMS / email in case there is any corrigendum issued to the tender document. • The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.
D	बोली की तैयारी / Preparation of bids	: <ul style="list-style-type: none"> • Bidder should take into account any corrigendum published on the tender document before submitting their bids. • Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid. • Bidder, in advance, should prepare the bid documents to be submitted as indicated in the tender document / schedule and generally shall be in PDF / XLS formats as the case may be. Bid documents may be scanned with 100 dpi with black and white option. • To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, GSTIN Details, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use “My Documents” area available to them to upload such documents. These documents may be directly submitted from the “My Documents” area while submitting a bid, and need not be uploaded again and

			again. This will lead to a reduction in the time required for bid submission process.
E	बोली की प्रस्तुति / Submission of bids	:	<ul style="list-style-type: none"> • Bidder should log into the site well in advance for bid submission so that he/she can upload the bid in time i.e. on or before the bid submission date and time. Bidder will be responsible for any delay due to other issues. • The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document. • Bidder has to transfer the EMD as applicable by online mode only. The EMD should be transferred on or before the closure date and time of the tender. If the EMD is not transferred before the closure date and time, the tender will be summarily rejected. The proof of transfer has to be submitted in the Technical Bid, Otherwise, the tender will be summarily rejected. • A standard BOQ format has been provided in Annexure-C with the tender document to be filled by all the bidders. Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. Bidders are required to download the BOQ file, open it and complete the detail with their respective financial quotes and other details (such as name of the bidder). If the BOQ file is found to be modified by the bidder, the bid will be rejected. • The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission. • The Tender Inviting Authority (TIA) will not be held responsible for any sort of delay or the difficulties faced during the submission of bids online by the bidders due to local issues. • The uploaded tender documents become readable only after the tender opening by the authorized bid openers. • Upon the successful and timely submission of bids, the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details. • Kindly add scanned PDF of all relevant documents in a single PDF file of compliance sheet.
F	बोलीदाताओं के लिए सहायता /Assistance to bidders	:	<ul style="list-style-type: none"> • Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender. • Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk. The contact number for the helpdesk is [0120-4200462, 0120-4001002, 0120-4001005]
G	बोलीदाताओं के लिए सामान्य अनुदेश / General Instructions to the Bidders	:	<ul style="list-style-type: none"> • The tenders will be received online through portal https://etenders.gov.in/eprocure/app. In the Technical Bids, the bidders are required to upload all the documents in single pdf file. • Possession of a Valid Class II/III Digital Signature Certificate (DSC) in the form of smart card/e-token in the company's name is a prerequisite for registration and participating in the bid submission activities through https://etenders.gov.in/eprocure/app • Digital Signature Certificates can be obtained from the authorized certifying agencies, details of which are available in the web site https://etenders.gov.in/eprocure/app under the "Information about DSC".

H	बयाना जमा ईएमडी Earnest Money Deposit (EMD)	<p>i. EMD of INR 9,30,000/- (Rupees Nine Lakhs and Thirty Thousand only) should be transferred through NEFT/RTGS to the following bank account on or before due date 04.03.2024 before 2:00 p.m. Name : Registrar IIT Madras Bank : State Bank of India Account No. : 10620824305 Branch : IIT MADRAS IFSC CODE : SBIN0001055</p> <p>ii. As per O.M. No.F.1/2/2022-PPD Dated 01.04.2022, the EMD will be returned to unsuccessful Bidder(s), within 30 days after declaration of result of first stage i.e. technical evaluation etc., The EMD shall be forfeited if any Bidder withdraws the offer before finalization of the tender.</p> <p>iii. The EMD amount should not be sent through DD.</p> <p>iv. Non-submission of EMD details on or before the due date and time will result in rejection of the e-bid.</p> <p>v. As per Rule 170 of GFR 2017, exemption of EMD will be given subject to submission of undertaking by the firm seeking such exemption. Copies of relevant orders/ documents regarding such exemption should be submitted along with the tender document</p> <p>vi. The successful bidder shall submit a Performance Guarantee of 3% of the purchase order value by way of DD/Bank Guarantee (Including e-Bank Guarantee)/FDR/ Insurance surety bonds in favour of "The Registrar, IIT Madras" to be obtained from any commercial bank, within 14 (Fourteen) days from the date of issue of order by IIT Madras, which would be released 60 days after the successful completion of the warranty period after the adjustment dues if any without interest.</p> <p>vii. In case of successful bidder, the EMD will be adjusted towards the Performance Security Deposit on request In case of successful bidder, the EMD will be adjusted towards the Performance Guarantee on request, subject to validity.</p> <p>viii. The amount of EMD is liable to be forfeited, if the bidder withdraws from the offer after submission of the tender or after the acceptance of the offer and fails to remit the Performance Security Deposit.</p>
I	तकनीकी बोली पर मार्किंग /Marking on Technical Bid	<p>i. The Bidder Eligibility Criteria, technical specification of the item for this tender is given in Annexure A. The Bidders shall go through the Bidder Eligibility Criteria – I & II, Technical Specification and submit the technical bid in the proforma given in Annexure B in the tender document along with the supporting documents.</p> <p>ii. The Technical bid should be submitted in pdf format only through online (e-tender). No manual submission of bid will be entertained.</p> <p>iii. The technical bid should have the page-wise heading as "Technical Bid" and page no. in all pages with seal and signature of authorized signatory. The total no. of pages should be mentioned at the last page of the documents.</p> <p>iv. The technical bid should consist of a) Document proof for EMD payment b) Technical Compliance sheet as per proforma given in Annexure –B c) Document proof for Bidder eligibility criteria, technical details along with catalogue / brochure and other technical, commercial terms and conditions.</p>
J	वित्तीय बोली पर मार्किंग Marking on Financial Bid	<p>Financial bid (BOQ) should be submitted in the prescribed format given in Annexure- C in xls format through e-tender only. No manual or other form of submission of Financial Bid will be entertained.</p>

निविदा के निबंधन व शर्तें TERMS AND CONDITIONS OF TENDER	
1.	<p>निविदा की तैयारी Preparation of Tender:</p> <ul style="list-style-type: none"> The bids should be submitted through online only in two bid system i.e. Technical Bid and Financial Bid separately. The bidder has to submit the tender document duly signed on all pages by an authorized person and his / her full name and status shall be indicated below the signature along with official seal/stamp of the firm. Submission of wrong / forged information / document will be liable to legal action, and rejection of the bid submitted by the firm. The bids of the agency/firm/company not in possession of valid statutory license / registrations are liable for rejection. If any relative of the bidder is an employee of the IIT Madras, the name, designation and relationship of such employee shall be intimated to the Registrar, IIT Madras in writing while submitting the bid. No bidder will be allowed to withdraw / alter / modify the bid during the bid validity period.
2.	<p>निविदा पर हस्ताक्षर Signing of Tender:</p> <ul style="list-style-type: none"> The Tender is liable to be rejected if complete information is not given therein or if the particulars and date (if any) asked for in the schedule to the Tender are not fully filled in or not duly signed/authenticated. Specific attention is drawn to the delivery dates and terms and conditions enclosed herewith. Each page of the bids required to be signed and bears the official seal of the Bidders. If the bid is submitted by a firm in partnership, it shall be signed (with seal) by all the partners of the firm above their full typewritten names and current addresses or alternatively by a partner holding power of attorney for the firm in which case a certified copy of the power of attorney shall accompany the application. A certified copy of the partnership deed along with current addresses of all the partners of the firm shall also accompany the application. If a limited company or a corporation makes the application, it shall be signed by a duly authorized person holding power of attorney for signing the application, in which case a certified copy of the power of attorney shall accompany the application. Such limited company or corporation may be required to furnish satisfactory evidence of its existence. The bidder shall also furnish a copy of the Memorandum of Articles of association duly attested by a Notary Public.
3.	<p>वह अवधि जिसके लिए ऑफर खुला रहेगा Period for which the offer will remain open: The Tender shall remain open for acceptance/validity till: 120 days from the date of opening of the tender. However, the day up to which the offer is to remain open being declared closed holiday for the Indian Institute of Technology Madras, the offer shall remain open for acceptance till the next working day.</p>
4.	<p>कीमत Prices:</p> <ul style="list-style-type: none"> The prices quoted by the bidders should be inclusive of Training, Installation, Transportation, GST and other charges. All conditional tenders will be summarily rejected.
5.	<p>भुगतान टीमें Payment terms :</p> <ul style="list-style-type: none"> Import: Letter of Credit (90% against shipping documents and 10% against installation) Local: 90% against delivery at site and 10% after installation. Advance if any required may be considered against the request of successful vendor by submitting equivalent amount of BG in addition to Performance Security Deposit.
6.	<p>सुपुर्दगी Delivery: The delivery period shall be 12-16 weeks from the date of issue of purchase order.</p>
7.	<p>Warranty and AMC:</p> <ul style="list-style-type: none"> 3 years Standard Warranty from the date of installation at no cost. Annual Maintenance contract (AMC) should be quoted as option for 4th and 5th year after the warranty period.

8.	Standards: Necessary standards and reagents for installation should be provided.
9.	Installation and Training : Installation and training should take place at IIT Madras site. The expenditure involved in it will be borne by the supplier. On site application training for minimum 3 days by the company designated application Scientist for a group of technical staff/students for operating the instrument to complete structure determination/solution including software learning.
10.	Down-time call attendance: Supplier should clearly mention about their service set up for prompt service support along with contact details of service engineers specially trained on the offered system. Service should be provided at earliest and 24 X 7 online support.
11.	निबंधन व शर्तें Terms and Conditions: Failure to comply with any of the instructions stated in this document or offering unsatisfactory explanations for non-compliance will likely to lead to rejection of offers.
12.	स्वीकृति का अधिकार Right of Acceptance: IIT Madras reserves the right to reject the whole or any part of the Tender without assigning any reason or to accept them in part or full.
13.	स्वीकृति की सूचना Communication of Acceptance: Letter of Intimation and acceptance will be communicated by post /email to the successful bidder to the address indicated in the bid.
14.	All information including selection and rejection of technical or financial bids of the prospective bidders will be communicated through CPP portal. In terms of Rule 173(iv) of General Financial Rule 2017, the bidder shall be at liberty to question the bidding conditions, bidding process and/or rejection of bids.
15.	बोलीदाता को इस निविदा के साथ जमा करना होगा Bidder shall submit along with this Tender: Name and full address of the Banker and their swift code and PAN No. and GSTIN number.
16.	क्षेत्राधिकार Jurisdiction: All questions, disputes, or differences arising under, out of or in connection with the contract, if concluded, shall be subject to the exclusive jurisdiction at the place from which the acceptance of Tender is issued.
17.	Right of IIT Madras <ul style="list-style-type: none"> • The Registrar, IIT Madras reserves right to withdraw / relax any of the terms and conditions mentioned above so as to overcome the problem encountered by the contracting parties. • The Registrar, IIT Madras reserves the right to accept or reject any or all the tenders without assigning any reason whatsoever and his / her decision shall be final and binding on the tenderer. • IIT Madras reserves the right to suitably increase / reduce the scope of supply put to this tender. In case of any ambiguity in the interpretation of any of the clauses in tender document or purchase order, interpretation of the clauses by the IIT Madras shall be final and binding on all parties.
18.	जुर्माना परिसमापन क्षति Penalty & Liquidated Damages / Force Majeure: <ul style="list-style-type: none"> • If the selected Bidder fails to complete the due performance of the contract in accordance with the terms and conditions, Institute reserves the right either to cancel the contract or to accept performance already made by the selected Bidder after imposing Penalty on Selected Bidder. A penalty will be calculated on a per week basis and on the same Rate as applicable to Liquidated Damages (LD). In case of termination of the contract, Institute reserves the right to recover an amount equal to 5% of the Contract value as Liquidated Damages for non-performance. • Both Penalty and Liquidated Damages are independent of each other and are applied separately and concurrently. Penalty and LD are not applicable for reasons attributable to the Institute and Force Majeure. However, it is the responsibility of the selected Bidder to prove that the delay is attributable to the Institute and Force Majeure. The selected Bidder shall submit the proof authenticated by the Bidder and Institute's official that the delay is attributed to the Institute and/or Force Majeure along with the bills requesting payment.
19.	The bidder shall certify that the tender document submitted by him / her are of the same replica of the tender document as published by IIT Madras and no corrections, additions and alterations made to the same. If any deviation found in the same at any stage and date, the bid / contract will be rejected / terminated and actions will be initiated as per the terms and conditions.
20.	The bidder shall study the tender document, Bidder Eligibility criteria and technical specification in detail as given in Annexure A before submitting the bid.

21.	<p>बोलीदाता पात्रता मानदंड Bidder Eligibility Criteria:</p> <ol style="list-style-type: none"> I. The bidder shall not be from a country sharing land border with India and if the bidder is from a country sharing land border with India the bidder should have been registered with the competent authority as per orders of DIPP OM No. F. No. 6/18/2019-PPD dated 23rd July 2020, and MoCI Order No. P-45021/112/2020-PP (BE II) (E-43780) dated 24th August 2020. A declaration shall be submitted with the bid as per format given in Annexure – D. II. Neither the tender participating firm nor any of its partner has been blacklisted / debarred /involved / convicted in any criminal case / economic offence nor any criminal case / economic offence is pending against firm or any partner of the Firm before any Court of Law / Police. A self-declaration format given in Annexure – E. III. The bidder must have an aggregate financial turnover of at least Rs.248 Lakhs in the last 3 years i.e. 2020-21, 2021-22 & 2022-23 (Should enclose the audited financial statement signed by the Chartered Accountant) IV. The bidder should be an OEM or authorized supplier of OEM. Necessary OEM certificate / OEM authorization letter for this particular tender should be submitted by the bidder as given in Annexure-F. V. The bidder should have a service centre in Chennai for service support. Proof of service centre in Chennai should be furnished as documentary evidence (such as valid rental agreement/GST Certificate/ Certificate of incorporation etc.) VI. The bidder/OEM should have 10 years experience in supply of Single Crystal X-ray Diffractometer (similar to the tendered item) and should have supplied the item as detailed below to the reputed Institutions like IIT/NIT/ Central or State Government / Central Research Labs / R&D units/ IISc, IISERs in India as detailed below: <ol style="list-style-type: none"> a. Three(3) similar contracts each costing not less than Rs. 124 Lakhs; (Or) b. Two(2) similar contracts each costing not less than Rs. 186Lakhs; (Or) c. One(1) similar contract not costing less than Rs. 248 Lakhs <p>Copies of the document listed below should be submitted as a proof for the above work experience:</p> <ol style="list-style-type: none"> a. Work Order/ purchase order should be submitted and also the list of similar instruments supplied including contact details (name of the person-in-charge, email, and phone number) should be provided. b. Work Completion Certificate/ User performance Certificate from End User
22.	<p>बोलियों की संख्या और उनका प्रस्तुतीकरण Number of Bids and their Submission: Bids should be submitted in CPP portal. Two bid system should be followed as detailed below:</p> <p>Bid I Technical Bid</p> <ul style="list-style-type: none"> • The bidder should go through the Bidder Eligibility Criteria and Technical Specification given in Annexure-A of the tender document, understand the requirement of IITM and submit their technical bid along with all relevant document proof in the proforma given in Annexure–B. Any tender documents without these shall be invalid and rejected. • The technical bid should consist of proof of EMD transfer, Bidder Eligibility Criteria, Technical specification and compliance sheet (proforma given in Annexure – B) along with all relevant documents proof. <p>Bid II Financial Bid</p> <ul style="list-style-type: none"> • Financial bid should be submitted only in CPP Portal as per Proforma for Financial bid format given in Annexure (C). No manual or other form of submission of Financial bid will be entertained. • The Quoted price should be for supply, installation, transportation, loading and unloading of the item and inclusive of all cost at IIT Madras.

23.	<p>बोलियों का मूल्यांकन / Evaluation of Bids: Bid Evaluation will take place in two stages.</p> <p>Stage I: Technical Bid evaluation:</p> <ol style="list-style-type: none"> 1. In the 1st stage, the Bidder will be evaluated first for conformity with Bidder Eligibility Criteria and those bidders who have complied with this criteria will alone be evaluated further. 2. In the 2nd stage, the Technical Specification offered by the bidders will be evaluated by the technical committee for compliance. Only those bidders who have fully complied with Bidder Eligibility Criteria and Technical Specification will be considered for financial bid evaluation. <p>Stage II: Financial Bid Evaluation:</p> <ol style="list-style-type: none"> 1. The Lowest financial bid among those who have qualified in the Technical bid will be declared as successful bidder (L1) and the order will be awarded to successful bidder (L1). Financial bid prices expressed in multi-currency (INR / USD / EUR) shall be converted to INR as per the prevailing RBI exchange rate on the date of opening of Financial bid. 2. Price quoted by the bidder in financial bid (BoQ) for Sl. No. 1 viz. SUPPLY OF SINGLE CRYSTAL X-RAY DIFFRACTOMETER will alone be taken up for arrival of lowest bid (L1) values. Sl. No. 2 & 3 Optional item will not be considered for financial bid evaluation.
24.	<p>'Class-I local suppliers' and 'Class-II local suppliers', as defined under DIPP, MoCI Order No. P45021/2/2017-PP (BE II) dated 16th September 2020 and other subsequent orders issued therein, shall be eligible to bid in this tender. Declaration for Class-I / Class-II local suppliers should be submitted in the prescribed proforma format as per Annexure – G.</p>
25.	<p>सफल बोलीदाता का चयन और आदेश प्रदान करना Selection of successful bidder and Award of Order: The order will be directly awarded to the technically qualified bidder as per the condition in para 3A of DIPP, MoCI Order No. 45021/2/2017-PP (BE II) dated 16th September 2020 and other subsequent orders issued therein.</p>
26.	<p>The bidders will not be entertained to participate in opening of Bids. Since the tender is e-tender, the opening of the bids may be checked using the respective logins of the bidders.</p>
27.	<p>In accordance to the Rule 173 of GFR, 2017 and relevant provisions thereof in Procurement Manuals, 2022, IITM reserves the right to carry out the negotiation process through its purchase/technical committee with L1/H1 (as applicable) vendor to ensure price reasonability before final recommendation to the Competent Authority. The negotiation details, if any, on case to case basis shall be recorded in minutes of meeting suitably for records.</p>

Sd/-
Assistant Registrar
Stores & Purchase

ACKNOWLEDGEMENT

It is hereby acknowledged that I/We have gone through all the points listed under “Bidder Eligibility Criteria, Technical Specification and Terms & Conditions” of tender document, the same is abided and agreed to be executed. In case, if any of the information furnished by me/us is found false, I/We are fully aware that the tender /contract will be rejected / cancelled by IIT Madras & EMD shall be forfeited.

**Signature of the Bidder
Name & Address of the
Bidder with Office Stamp**

SCHEDULE OF TENDER

SUPPLY OF SINGLE CRYSTAL X-RAY DIFFRACTOMETER – 1 No.

Tender No. IITM/SPS/SC-XRD/038/GTE/2023-24/SPL

Name of Organization	Indian Institute of Technology Madras
Tender Type (Open/Limited/EOI/Auction/Single)	OPEN
Tender Category (Services/Goods/Works)	Goods
Type/Form of Contract (Work/Supply/Auction/ Service/ Buy/ Empanelment/ Sell)	Supply
Name of the Supply	SUPPLY OF SINGLE CRYSTAL X-RAY DIFFRACTOMETER AT IIT MADRAS
Source of Fund (Institute/Project)	IIT Madras
Is Multi Currency Allowed	Yes
Date of Issue/Publishing	26.02.2024
Document Download Start Date	26.02.2024
Document Download End Date	04.03.2024
Bid Submission Start Date	26.02.2024
Last Date and Time for Uploading of Bids	04.03.2024 @ 02.00 p.m.
Date and Time of Tender Opening	05.03.2024 @ 03.00 p.m.
No. of Covers (1/2/3/4)	2
Bid Validity days (180/120/90/60/30)	120 Days
Address for Communication	<p><u>For Technical Queries:</u> Prof. Anbarasan P Professor, Chemistry Department, IIT Madras Chennai - 600 036. Phone No: 044- 2257- 5686 Email: anbarasansp@iitm.ac.in</p> <p><u>For General Queries:</u> The Assistant Registrar Stores & Purchase Section IIT Madras Chennai – 600 036 Email : adstores@iitm.ac.in Contact No. 044- 2257 8287/8288/8290/8285</p>

**SUPPLY OF SINGLE CRYSTAL X-RAY DIFFRACTOMETER – 1 No.
Tender No. IITM/SPS/SC-XRD/038/GTE/2023-24/SPL**

बोलीदाता पात्रता मानदंड Bidder Eligibility Criteria:

- I. The bidder shall not be from a country sharing land border with India and if the bidder is from a country sharing land border with India the bidder should have been registered with the competent authority as per orders of DIPP OM No. F. No. 6/18/2019-PPD dated 23rd July 2020, and MoCI Order No. P-45021/112/2020-PP (BE II) (E-43780) dated 24th August 2020. A declaration shall be submitted with the bid as per format given in **Annexure – D**.
- II. Neither the tender participating firm nor any of its partner has been blacklisted / debarred /involved / convicted in any criminal case / economic offence nor any criminal case / economic offence is pending against firm or any partner of the Firm before any Court of Law / Police. A self-declaration format given in **Annexure – E**.
- III. The bidder must have an aggregate financial turnover of at least Rs.248 Lakhs in the last 3 years i.e. 2020-21, 2021-22 & 2022-23 (Should enclose the audited financial statement signed by the Chartered Accountant)
- IV. The bidder should be an OEM or authorized supplier of OEM. Necessary OEM certificate / OEM authorization letter for this particular tender should be submitted by the bidder as given in **Annexure-F**.
- V. The bidder should have a service centre in Chennai for service support. Proof of service centre in Chennai should be furnished as documentary evidence (such as valid rental agreement/GST Certificate/ Certificate of incorporation etc.)
- VI. The bidder/OEM should have 10 years experience in supply of Single Crystal X-ray Diffractometer (similar to the tendered item) and should have supplied the item as detailed below to the reputed Institutions like IIT/NIT/ Central or State Government / Central Research Labs / R&D units/ IISc, IISERs in India.
 - a. Three(3) similar contracts each costing not less than Rs. 124 Lakhs; (Or)
 - b. Two(2) similar contracts each costing not less than Rs. 186Lakhs; (Or)
 - c. One(1) similar contract not costing less than Rs. 248 Lakhs

Copies of the document listed below should be submitted as a proof for the above work experience:

- a. Work Order/ purchase order should be submitted and also the list of similar instruments supplied including contact details (name of the person-in-charge, email, and phone number) should be provided.
- d. Work Completion Certificate/ User performance Certificate from End User

TECHNICAL SPECIFICATION:

Sl. No.	Technical Specifications	
SUPPLY OF SINGLE CRYSTAL X-RAY DIFFRACTOMETER AT IIT MADRAS		
1	X-Ray Source:	Micro focus X-ray source of Molybdenum radiation with a power output of 55 W or more. A completely air-cooled X-ray source is preferred to achieve stable intensity and long tube life with very minimum or no maintenance. The minimum beam intensity at the sample should be $\geq 3 \times 10^9$ ph/(s-mm ²) at beam divergence ≤ 5.0 mrad with beam size not exceeding 150 microns.
2	Detector:	Photon counting large active area detector with minimum of 70 cm ² or larger with higher theta coverage in single image (minimum of 61 degrees in 2Theta (0.7Å) at 6 cm distance) to achieve fast completeness (for handling air-sensitive samples) and measure highly redundant data for more accurate structures. The Detector should be of monolithic sensor without any blind regions and should have a highest Detective Quantum Efficiency (minimum DQE $\geq 90\%$) for Molybdenum radiation. The detector should have a point spread function ≤ 1 pixel with size of the pixels should not be greater than 150µmX150µm. Dynamic range of the detector should be better than $> 2 \times 10^5$.
3	Goniometer:	Four circle Kappa goniometer with sphere of confusion not greater than 7 microns. The sample to the detector distance should be variable under computer control over a range of at least 35-200 mm or longer.
4	Crystal viewing video:	Appropriate crystal viewing colour video microscope to enable mounting and centering of crystals should be included.
5	Integrated software:	A fully integrated WINDOWS based licensed software for handling the instrument for data collection and processing till structure solution and refinement must be an integral part of the system. The software should be of site license to be able to instal on any number of PCs within IIT Madras campus
6	Computer:	The Diffractometer should come with latest generation PC with Factory loaded Software. Specifications of the PCs should be following or better: Intel Core i7-8700, 16 GB RAM, 256 GB SSD, 2.0 TB hard disk drive, 27" LED monitor
7	UPS:	Suitable 5 KVA with 1-hour Battery backup reputed make On-Line UPS with built-in isolation transformer and event logging facility to run the above-mentioned system and computer for uninterrupted data collection
8	Low-temperature attachment	A low temperature device with the temperature range of 80 – 400 K should be quoted optionally along with auto filling capabilities with 150 L additional Dewar for LN2 storage.
9	Crystal Mounting Accessories:	Goniometer Heads: <ul style="list-style-type: none"> 2 No's of Manual Goniometer head with strong magnetic base

		<ul style="list-style-type: none"> • Test crystals: 1 No • 2 Necessary Crystal mounting kits which include oil (Paratone N or equivalent), cryo-loops of different dimensions (minimum 5 pieces of each size), crystal storage vials, goniometer base etc.
10	Pre-Installation requirement:	Necessary pre-installation advice should be enclosed along with the technical bid.
11	Optional Items :	<ol style="list-style-type: none"> 1. Crystal mounting microscope An appropriate latest generation stereo microscope (Leica or Carl Zeiss make) for crystal mounting should be quoted with min of following specs: 0.8 – 4X zoom optics Eyepiece 10X Working distance 80 – 95 mm or better Polarizer & Analyzer set 2. Crystalpin ALS HT HR8-204, 0.1 – 0.2 MM (30 pack) – 1 No 3. Crystalpin ALS HT HR8-208, 0.3 – 0.4 MM (30 pack) – 1 No 4. 1 pack of (25 no's) of special glass crystal mounting capillary of 0.5 mm size should be quoted 5. Two 500 ml and two 1 litre dish-shaped double-walled dewars 6. One vacuum pump (capacity: 2×10^{-3} mm Hg) 7. One 0 °C and one -40 °C freezer (500 Liter capacity)

PROFORMA FOR TECHNICAL COMPLIANCE SHEET
SUPPLY OF SINGLE CRYSTAL X-RAY DIFFRACTOMETER – 1 No.
Tender No. IITM/SPS/SC-XRD/038/GTE/2023-24/SPL

BIDDER ELIGIBILITY CRITERIA:

S. No.		Compliance (Yes / No)	Reference Page No.
1	The bidder shall not be from a country sharing land border with India and if the bidder is from a country sharing land border with India the bidder should have been registered with the competent authority as per orders of DIPP OM No. F. No. 6/18/2019-PPD dated 23rd July 2020, and MoCI Order No. P-45021/112/2020-PP (BE II) (E-43780) dated 24th August 2020. A declaration shall be submitted with the bid as per format given in Annexure – D.		
2	Neither the tender participating firm nor any of its partner has been blacklisted / debarred /involved / convicted in any criminal case / economic offence nor any criminal case / economic offence is pending against firm or any partner of the Firm before any Court of Law / Police. A self-declaration format given in Annexure – E.		
3	The firm must have an aggregate financial turnover of at least Rs.248 Lakhs in the last 3 years i.e. 2020-21, 2021-22 & 2022-23 (Should enclose the audited financial statement signed by the Chartered Accountant)		
4	The bidder should be an OEM or authorized supplier of OEM. Necessary OEM certificate / OEM authorization letter for this particular tender should be submitted by the bidder as given in Annexure-F.		
5	The bidder should have a service centre in Chennai for service support. Proof of service centre in Chennai should be furnished as documentary evidence (such as valid rental agreement/GST Certificate/ Certificate of incorporation etc.)		
6	<p>The bidder/OEM should have 10 years experience in supply of Single Crystal X-ray Diffractometer (similar to the tendered item) and should have supplied the item as detailed below to the reputed Institutions like IIT/NIT/ Central or State Government / Central Research Labs / R&D units/ IISc, IISERs in India.</p> <p style="padding-left: 40px;">I. Three(3) similar contracts each costing not less than Rs. 124 Lakhs; (Or) II. Two(2) similar contracts each costing not less than Rs. 186Lakhs; (Or) III. One(1) similar contract not costing less than Rs. 248 Lakhs</p> <p>Copies of the document listed below should be submitted as a proof for the above work experience:</p> <p style="padding-left: 20px;">a. Work Order/ purchase order should be submitted and also the list of similar instruments supplied including contact details (name of the person-in-charge, email, and phone number) should be provided.</p> <p style="padding-left: 20px;">b. Work Completion Certificate/ User performance Certificate from End User</p>		

TECHNICAL SPECIFICATION:

Sl. No.	Technical Specifications	Compliance (Yes / No)	Reference Page No.
SUPPLY OF SINGLE CRYSTAL X-RAY DIFFRACTOMETER AT IIT MADRAS			
1	X-Ray Source:	Micro focus X-ray source of Molybdenum radiation with a power output of 55 W or more. A completely air-cooled X-ray source is preferred to achieve stable intensity and long tube life with very minimum or no maintenance. The minimum beam intensity at the sample should be $\geq 3 \times 10^9$ ph/(s-mm ²) at beam divergence ≤ 5.0 mrad with beam size not exceeding 150 microns.	
2	Detector:	Photon counting large active area detector with minimum of 70 cm ² or larger with higher theta coverage in single image (minimum of 61 degrees in 2Theta (0.7Å) at 6 cm distance) to achieve fast completeness (for handling air-sensitive samples) and measure highly redundant data for more accurate structures. The Detector should be of monolithic sensor without any blind regions and should have a highest Detective Quantum Efficiency (minimum DQE $\geq 90\%$) for Molybdenum radiation. The detector should have a point spread function ≤ 1 pixel with size of the pixels should not be greater than 150µmX150µm. Dynamic range of the detector should be better than $> 2 \times 10^5$.	
3	Goniometer:	Four circle Kappa goniometer with sphere of confusion not greater than 7 microns. The sample to the detector distance should be variable under computer control over a range of at least 35-200 mm or longer.	
4	Crystal viewing video:	Appropriate crystal viewing colour video microscope to enable mounting and centering of crystals should be included.	
5	Integrated software:	A fully integrated WINDOWS based licensed software for handling the instrument for data collection and processing till structure solution and refinement must be an integral part of the system. The software should be of site license to be able to instal on any number of PCs within IIT Madras campus.	
6	Computer:	The Diffractometer should come with latest generation PC with Factory loaded Software. Specifications of the PCs should be following or better: Intel Core i7-8700, 16 GB RAM, 256 GB SSD, 2.0 TB hard disk drive, 27" LED monitor.	
7	UPS:	Suitable 5 KVA with 1-hour Battery backup reputed make On-Line UPS with built-in isolation transformer and event logging facility to run the above-mentioned system and computer for uninterrupted data collection	
8	Low-temperature attachment	A low temperature device with the temperature range of 80 – 400 K should be quoted optionally along with auto filling capabilities with 150 L additional Dewar for LN2 storage.	
9	Crystal Mounting Accessories	Goniometer Heads: <ul style="list-style-type: none"> • 2 No's of Manual Goniometer head with strong magnetic base • Test crystals: 1 No • 2 Necessary Crystal mounting kits which include oil 	

		(Paratone N or equivalent), cryo-loops of different dimensions (minimum 5 pieces of each size), crystal storage vials, goniometer base etc.		
10	Pre-Installation requirement:	Necessary pre-installation advice should be enclosed along with the technical bid.		
11	Optional Items:	<ol style="list-style-type: none"> 1. Crystal mounting microscope An appropriate latest generation stereo microscope (Leica or Carl Zeiss make) for crystal mounting should be quoted with min of following specs 0.8 – 4X zoom optics Eyepiece 10X Working distance 80 – 95 mm or better Polarizer & Analyzer set 2. Crystalpin ALS HT HR8-204, 0.1 – 0.2 MM (30 pack) – 1 No 3. Crystalpin ALS HT HR8-208, 0.3 – 0.4 MM (30 pack) – 1 No 4. 1 pack of (25 no's) of special glass crystal mounting capillary of 0.5 mm size should be quoted 5. Two 500 ml and two 1 litre dish-shaped double-walled dewars 6. One vacuum pump (capacity: 2×10^{-3} mm Hg) 7. One 0 °C and one -40 °C freezer (500 Liter capacity) 		

*** Reference page number is mandatory and should be mentioned in the technical compliance**

**SIGNATURE OF BIDDER ALONG WITH
SEAL OF THE COMPANY WITH DATE**

PROFORMA FOR FINANCIAL BID (BoQ)

SUPPLY OF SINGLE CRYSTAL X-RAY DIFFRACTOMETER – 1 No.
Tender No. IITM/SPS/SC-XRD/038/GTE/2023-24/SPL

Sl.No.	Item Description	Unit	Qty	Quoted Currency in INR/USD /EUR	Unit Rate in Figures, to be entered by the Bidder in INR (or) Ex-works rate for USD / EUR	GST/CIP Chennai charges	Total value incl. of GST
					(A)	(B)	
1	SUPPLY OF SINGLE CRYSTAL X-RAY DIFFRACTOMETER as per technical specification in Annexure-A	No.	1			ENTER AND SUBMIT THE FINANCIAL BID IN THE CPP (e-PROCUREMENT POTAL)	
2	Optional Items in Sl. No.11 as per technical specification in Annexure-A						
3	Optional AMC of the equipment for a period of 2 years after the standard warranty						
	4 th Year						
	5 th Year						
TOTAL COST INCLUSIVE OF ALL							

Note:

The prices quoted by the bidders should be inclusive of Training, Installation, Transportation, GST and other charges.

Price quoted by the bidder in financial bid (BoQ) for Sl. No. 1 viz. SUPPLY OF SINGLE CRYSTAL X-RAY DIFFRACTOMETER will alone be taken up for arrival of lowest bid (L1) values. Sl. No. 2 & 3 Optional item will not be considered for financial bid evaluation.

**SIGNATURE OF BIDDER ALONG WITH
SEAL OF THE COMPANY WITH DATE**

(To be given on the letter head of the bidder)

Tender No. IITM/SPS/SC-XRD/038/GTE/2023-24/SPL

Dated: _____

CERTIFICATE

(Bidders from India)

I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and hereby certify that I am not from such a country.

OR

(Bidders from Country which shares a land border with India)

I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and hereby certify that I am from _____ (Name of Country) and have registered with the Competent Authority. I also certify that I fulfil all the requirements in this regard and am eligible to be considered. *(Copy/ evidence of valid registration by the Competent Authority is to be attached)*

Place:
Date:

**Signature of the Bidder
Name & Address of the
Bidder with Office Stamp**

(To be given on the letter head of the bidder)

Self-Declaration that the Service Provider has not been Black listed

I S/o

R/o police station District Director

/ Partner/ sole proprietor (Strike out whichever is not applicable) of

..... (Firm or Company) do hereby declare and solemnly affirm:

- I. That the Firm has not been Blacklisted or declared insolvent by any of the Union or State Government / Organization.
- II. That none of the individual / firm / Company Blacklisted or any partners or shareholder thereof has any connection directly or indirectly with or has any subsistence interest in the deponent business / firm company.
- III. That neither the Firm nor any of its partner has been involved / convicted in any criminal case / economic offence nor any criminal case / economic offence is pending against firm or any partner of the Firm before any Court of Law / Police.

Place:
Date:

Signature of the Tenderer
Name & Address of the
Tenderer with Office Stamp

OEM CERTIFICATION FORM

(In Original Letter Head of OEM)

Tender No: Dated:

We are Original Equipment Manufacturers (OEM) of..... (Name of the company)

Ms..... (Name of the vendor) is one of our Distributors/Dealers/Resellers/Partners (tick one) for the and is participating in the above mentioned tender by offering our product model..... (Name of the product with model number).

..... Is authorized to bid, sell and provide service support warranty for our product as mentioned above.

Please mention Country of Origin

Name and Signature of the authorized Signatory of OEM along with Seal of the company with Date

**FORMAT FOR AFFIDAVIT OF SELF-CERTIFICATION UNDER PUBLIC PROCUREMENT POLICY
(PREFERENCE TO MAKE IN INDIA) 2017**

Tender Reference Number: Tender No. IITM/SPS/SC-XRD/038/GTE/2023-24/SPL

Name of the item / Service: SUPPLY OF SINGLE CRYSTAL X-RAY DIFFRACTOMETER – 1 No.

Date: _____

I/We _____ S/o, D/o, W/o,

Resident of _____

hereby solemnly affirm and declare as under:

That I will agree to abide by the terms and conditions of the Public Procurement (Preference to Make in India) Policy vide GoI Order no. P-45021/2/2017-PP (B.E.-II) dated 15.06.2017 (subsequently revised vide orders dated 28.05.2018, 29.05.2019 and 04.06.2020) MOCI order No. 45021/2/2017-PP (BE II) Dt.16th September 2020 & P- 45021/102/2019-BE-II-Part(1) (E-50310) Dt.4th March 2021 and any subsequent modifications/Amendments, if any and

That the local content for all inputs which constitute the said item/service/work has been verified by me and I am responsible for the correctness of the claims made therein.

Tick (✓) and Fill the Appropriate Category	
<input type="checkbox"/>	I/We _____ [name of the supplier] hereby confirm in respect of quoted items that Local Content is equal to or more than 50% and come under “Class-I Local Supplier” category.
<input type="checkbox"/>	I/We _____ [name of the supplier] hereby confirm in respect of quoted items that Local Content is equal to or more than 20% but less than 50% and come under “Class-II Local Supplier” category.

The details of the location (s) at which the local value addition is made and the proportionate value of local content in percentage

Percentage of Local content : _____ %**

Location at which value addition done : _____

For and on behalf of (Name of firm/entity)

Authorized signatory (To be duly authorized by the Board of Directors)

<Insert Name, Designation and Contact No.>

[Note: In case of procurement for a value in excess of Rs. 10 Crores, the bidders shall provide this certificate from statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.]

This letter should be on the letterhead of the quoting firm and should be signed by a competent authority.

** Services such as
transportation, insurance, installation,
commissioning, and training and after
sales service support like AMC/CMC
cannot be claimed as local value
addition