

सामग्री प्रबंधन अनुभाग भारतीय प्रौद्योगिकी संस्थान रूडकी

रूडकी–247667, हरिद्वार, उत्तराखण्ड, भारत

Phone-(O) 01332-28-4293, 4693

E-mail: mmiitr@iitr.ac.in

GSTIN-05AAALI0033R1Z5

PAN-AAALI0033R

Material Management Section Indian Institute of Technology Roorkee-247667(Haridwar) (Uttarakhand) (India) Phone-(O) 01332-28-4293, 4693

E-mail: mmiitr@iitr.ac.in



निविदा प्रलेख / Tender Document

No. 1600001360/MM-24/IITR/2021-22/Small Molecule single cry/CHEMISTRY/49

Date of Uploading of Tender -https://eprocure.gov.in/eprocure/app

12/Jul/2021

Bids under two bid systems (Technical and Commercial) are invited Online at CPP Portal (https://eprocure.gov.in/eprocure/app) from the reputed manufacturer/authorized supplier/dealer for the following items. **Manual bids will not be accepted.**

वस्त की तकनीकी विशिष्टताएँ / Technical Specifications of item:

Sr. No	Name of item / Specifications	QTY	UOM
1	Small Molecule single crystal X-ray Diffractometer	1	Set
	(For Detailed Technical Specification Plz refer A	nnexure-VI)	
	नोट—1: कृपया वस्तु का मूल्य एवं कर अलग—अलग	ा दर्षाए।	
	Note-1: Please quote the Rate & Taxes of the item se	parately.	
	Note-2: E-way bill is to be issued by the Venders,	/Transporter	
	Note-3: The HSN / SAC Code of the item must be	mentioned.	
For Reasonabi	lity of Rates, The firm must enclose the last two supply orders for the sam	e item with Financial	Bid (Annexure-III) only.
	Critical Date Sheet		
1	Published Date	12/Jul/2021	(17:00)
2	Bid Document Download / Sale Start Date	12/Jul/2021	(17:30)
3	Seek Clarification Start Date	12/Jul/2021	(18:00)
4	Seek Clarification End Date	15/Jul/2021	(16:00)
5	Pre Bid Meeting Date	Not Required	Not Required
6	Bid Submission Start Date	16/Jul/2021	(10:00)
7	Bid Submission End Date	2/Aug/2021	(17:00)
8	Bid Opening Date	3/Aug/2021	(12:00)

Chapter-1: Instruction to bidders

- **A.** The Tender should be enclosed with proper certifications like Agency Certification, Authorization certificate and/or Proprietary Certificate, as the case may be , in support of your offer.
- B. बोली का जमा किया जाना / Submission of Bids:

The bids should be submitted online in two parts -

- (i) The Technical Bid (Annexure-I, II, IV, V & VI) and Tender Acceptance Letter
 - (ii) The Financial Bid (Annexure-III) & Price Bid in .XLS Format

Rates in .xls format will only be considered for Financial evaluation & further processing.

2 The bids should be on official pad preferably with GST Number of the firm

1600001360 10f18

- The quotations should bear full details and where possible may be duly supported with catalogues, pamphlets, literature, samples of the item/items as the case may be for comparing the quality and rates of the item(s).
- 4 The transportation cost, insurance charge etc., if any, percentage/ rate of GST or all other taxes and duties should be clearly mentioned.
- 5 The bids / rates / tenders should remain valid for a minimum period of 90 days from the date of financial opening.
- Since this purchase being for research purpose, I.I.T., Roorkee is registered in DSIR, New Delhi, it is therefore exempted from the payment of GST up to the limit of exemption as per Govt. Rules. The bidder should quote accordingly.
- 7 The rates shall not be subject to escalation of any nature.
- 8 The rates quoted should be applicable to educational institutions and any cost advantage received in lieu thereof should be passed on the Institution.
- 9 While quoting / sending rates, the firm shall give an undertaking as per Annexure-II.
- C. विधि निक्षेप / Earnest Money Deposit (EMD):

In lieu of EMD, declaration is to be provided/submitted as per annexure-IV of the tender document.

D. निष्पादन बैंक प्रत्याभृति / Performance Bank Guarantee (PBG):

In case the total order value of items becomes Rs.25.00 Lakhs or above, 3% of the total order value in the form of Bank Guarantee or FDR pledged in favor of "The Registrar, IIT Roorkee" is required at the time of installation of the equipment which should remain valid at least during the warranty period plus sixty days. No interest shall be claimed by the bidder on the PBG submitted.

- E. बोलियो का खोला जाना / Opening of Bids:
- The Technical Bids will be opened online at CPPP Portal (https://eprocure.gov.in/eprocure/app)-Plz refer Critical Date
 Sheet
- The Financial bids of only the Technically Qualified bidders will be opened. The date and time for opening the Financial Bid will be communicated to the respective firm later by the system (CPP Portal (https://eprocure.gov.in/eprocure/app))
- 3 Representatives of the firms(s) may be present at the time of openings, if they so desire.

Chapter-2: Conditions of Contract

F. ठेका देना / Award of Contract:

The final selection of the bidder for the award of the contract will be made on the basis of the lowest commercial bid amongst the Technically Qualified Bidders.

G. पूर्व—आपूर्ति निरीक्षण / Pre-supply Inspection:

Authorized representative of the Institute shall make the final inspection before supply of the item at site of the firm, if required.

H. वस्तु की आपूर्ति / Supply of Item:

The whole supply as per order shall have to be completed within the time mentioned in the order failing which the I.I.T. Roorkee shall have the right to accept or reject any quantity of items ordered. The firm will have to arrange for supply of the material in good condition.

- I. भगतान की शर्ते / Payment Terms:
- A. Payment in INR for supply of goods:

Where installation is not required: 100% payment will be made after satisfactory delivery of material duly certified by the HOD/P.I.

OR

Where Installation is required :100% payment will be made after satisfactory delivery and installation of the material duly certified by the HOD/P.I.

OR

80% payment will be made on receipt and acceptance of goods and balance 20% on successful installation and commissioning duly certified by the HOD/P.I.

OR

100% Advance will be paid against submission of 110% Bank Guarantee of the Total Order value. Bank Guarantee should be in favor of "The Registrar, IIT Roorkee" which should be valid till the date of Installation/Delivery period + 30 days

J. दंड/Penalty:

A penalty of 0.5% of the total order value per week shall be levied for the delay subject to a maximum of 5% of the total order value.

In case of the non-supply of the item after the acceptance of the work/supply order, the firm will be debarred from any future bidding process of IIT Roorkee for a period of minimum one year.

(Please refer annexure-IV)

1600001360 2of18

K. अप्रत्याषित घटना/Force Majeure:

For the purpose of and within the scope of contract by way of indication and not of limitation, the term "Force Majeure" shall mean acts of nature, strikes, Lockouts, or other industrial disturbances, act of public/enemy, wars, blockades, insurrection, riots, epidemics, landslides, earthquakes, storms lightening, flood, washouts, civil disturbances, explosion and any other similar even not within the control of either party on which by exercise of due care and diligence neither party is able to prevent or overcome.

L. मध्यस्थता / Arbitration:

In the event of any difference or dispute arising out this work, all effort shall be made by both the parties to settle the same amicably. Failing an amicable settlement, the dispute shall be finally settled through arbitration conducted under the Arbitration and Conciliation Act 1996, by arbitrators appointed in accordance with the said Act. The arbitration shall give reasoned and speaking award. All disputes are subject to Roorkee jurisdiction only.

M. बोली अस्वीकृती के लिए मानदंड / Criteria for bid rejection:

- 1 If technical bid found without the required undertaking (Annexure-II), declaration (Annexure-IV) & Self Certificate (Annexure-V)
- If it found at a later date that any information given in the bids is Incorrect/false then the bid is liable to be disqualified/rejected.
- 3 Canvassing in any form will result to disqualification.
- 4 If "extra, as actual" etc. are mentioned against any of the price components in the bid the bid will be rejected.
- If the firm quotes 'NIL' charges / consideration, the bid shall be treated as unresponsive and will not be considered.
- 6 If financial bid is found along with technical bid in pdf on CPP Portal, then the bid shall be rejected outrightly.
- 7 If any bidder submitting two/multiple bids for the same item of a tender, both/all the bids of that bidder will be outrightly rejected.

Chapter-3: Schedules of requirements

- N. टिप्पणी / Note:
- 1 If the supplier/firm is manufacturer/authorized dealer/sole distributor/of the item, the certificate to this effect should be attached.
- Please note that the firms must submit the compliance Statement in an organized and structured manner in respect of all the specifications as per Annexure-VI with the supporting catalogue/leaflet of the firm. Annexure-I, II, IV & V have to be submitted with Technical Bid and Annexure-III with financial bid.
- It may also be noted that the tender bids received after the stipulated date & time or found incomplete and the tender bids containing false/incorrect information shall be summarily rejected. The Institute shall not entertain any communication in this regard, whatsoever.
- 4 The firm is required to give its Bank Account details with IFSC for the purpose of making e-payment.
- The Indian Institute of Technology (IIT) Roorkee reserves the right to reject any quotation wholly or partly without assigning any reason.
- The quantity shown in the tender can be increased or decreased to any extent depending upon the actual requirement.
- The decision of the institute in all matters relating to eligibility, acceptance, rejection of the bid will be final and binding on the applicants.
- 8 IIT Roorkee discourages High Sea Sale purchase. All tenders with High Sea Sale will be rejected.
- 9 The firms should clearly mention (in the financial bid) the Harmonized System of Classification (HS code) defined by the Central Custom and Excise Board (Govt. of India)- for the item(s) involving import.
- If the bid opening date happens to be a holiday, then the bid will be opened at 3.30PM of the next working day followed by the holiday.
- If an agent submits bid on behalf of the Principal/OEM, the same agent can not submit a bid on behalf of another Principal/OEM in the same tender for the same item/product.
- Indian Agent should submit the certificate from the Foreign Principal that they are the Authorized & Registered Indian Agent.
- The quantity shown against the item is approximate and may vary as per demand of the Institute at the time of placing order. Also, the final requirement of each line item will be decided by the Institute at the time of placing the PO.
- Any corrigendum/addendum/errata in respect of the Tender Notice/ Enquiry letter shall be made available CPP Portal (https://eprocure.gov.in/eprocure/app). Hence prospective bidders are advised to visit the CPP Portal (https://eprocure.gov.in/eprocure/app) regularly.

1600001360 3of18

- Bidders shall be responsible for the correctness of the information provided in the enquiry letter/tender document. If it is found at a later date that any information given in the bid is Incorrect/false then the bid is liable to be disqualified/rejected.
- Before submission of bids, bidders should read the complete enquiry letter/tender document carefully and ensure that the bidders fulfill the eligibility criteria.
- In case the item/product is under rate contract with DGS&D or GeM, then Bidder should certify that the rate quoted is not over and above (higher side) the rates under RC with the DGS&D or GeM.
- In Item Wise BoQ .xls sheet, In column M, leave blank for the item/service not provided/quoted by you. If quoted 0 then it will be considered that the item/service will be provided free of cost.

Or

In Item Rate BoQ .xls sheet, If quoted 0 for the items/services in column M then it will be considered that the items/services will be provided free of cost.

The bidder must quote the applicable GST appropriately in the price bid format provided i.e BoQ in .xls format. In case column of GST left blank or have any error, oversight in quoting GST rate, the total quoted amount shows in column BB would be final inclusive of GST & other charges. The difference in GST amount payable – if any will be borne by the bidder. In this case, the basic unit prices will be suitably adjusted by the bidder – if required.

For research purpose(s) ONLY, 5% GST will be applicable.

- Only 'Class-I local supplier' and 'Class-II local supplier', as defined in the Public Procurement (Preference to Make in India), Order 2017 shall be eligible to bid in tender. For more details please refer: Order No.: P-45021/2/2017-PP (BE-II), DPIIT, Ministry of Commerce and Industry issued Dated: 16th Sept. 2020.
 - Self-certificate has to be provided in this regard that the item offered meets the local content requirement for 'Class-I local supplier' & 'Class-II local supplier'. (As per annexure-V)
- The Institute reserves the right to rectify any discrepancy of this advertisement, if found later on. In case of any inadvertent mistake in the process which may be detected at any stage even after the issue of purchase order, the Institute reserves the right to modify/withdraw/cancel any communication made to the bidder.

Chapter-4: Specifications and allied Technical details

Plz. See Annexure- I, II, IV, V, VI

Chapter-5: Price Schedule (to be utilized by the bidders for quoting their prices online in .XLS format at CPPP Portal (https://eprocure.gov.in/eprocure/app)

Plz. See Annexure- III & Price Bid in .XLS Format

Chapter-6: Contract Form

Purchase Order is used as Contract Form

Chapter-7: Other Standard Forms, if any to be utilized by the purchaser and bidders

Tender Acceptance Letter

*उप कुलसचिव (सामग्री प्रबंधन) / सहायक कुलसचिव (सामग्री प्रबंधन)
Deputy Registrar (MM)/ Assistant Registrar (MM)

*Document Digitally Signed on https://eprocure.gov.in/eprocure/app

For any Clarification regarding technical specifications of item Please Contact:

Head, Deptt. of Chemistry, IIT Roorkee Deptt. of Chemistry, IIT Roorkee

Ph.-01332-28-5218

Email: head@cy.iitr.ac.in, chemt@iitr.ac.in

1600001360 4of18

तकनीकी बोली

विस्तृत विवरण अनुपालन रिपोर्ट के साथ प्रस्तुत किया जाना है (अपने आधिकारिक लेटर हेड पर विकेता / फर्म द्वारा प्रस्तुत करने के लिए)

Detailed specification cum compliance report to be submitted with the Technical Bid (to be submitted by the vendor/firm on its official letter head)

(For Detailed Technical Specification Plz refer Annexure-VI)

Sr.No	Name & Required Specifications of Item(s) Small Molecule single crystal X-ray Diffractometer		Qty	UOM	Offered specifications of item(s) by the firm
1			1	Set	
	Firm's Profile :				
1	Manufacturer/Authorized Agent/Distributor/Dealer/Supplier(valid certificate must be attached)				
2	E-mail I.D. & Telephone/Mobile No. Detail of Bank A/C				
Note:	1. "offered specifications", should be filled up properly in the format provided as per Annexure-I.				
	2. Volume & Weight of the item should also be mentioned.				
	3. The HSN / SAC Code of the item must be mentioned.				

Signature:
Name :
Designation :

Seal of the Organisation

1600001360 5of18

उपबंध / UNDERTAKING

Ref. No. Dated:-	No. 1600001360/MM-24/IITR/2021-22/Small Molecule single cry/CHEMISTRY/49 12-Jul-21
	That all the terms/conditions mentioned in the enquiry letter/tender against which the rates are being given are acceptable to the firm.
	It is certified that the rate quoted is not over and above (higher side) the rates under RC with the DGS&D or GeM.
	It is certified that the firm has never been black-listed from any Government Department. (State/Central Govt./ Autonomous/ PSU)
	Signature
	Name

1600001360 6of18

Financial Bid

(to be submitted by the vendor/firm on its official letter head)

Ref. No. No. 1600001360/MM-24/IITR/2021-22/Small Molecule single cry/CHEMISTRY/49

Date: 12-Jul-21

Rates:

Sr. No	Name of item / Specifications	Qty	UOM	Rate	Amount (INR Only)
				To be filled in	.XLS sheet (attached)
	Т	otal			
	Grand	Total Rs.			

¹⁾ Price of the items should be clearly mentioned if supplied Free of Cost.

Terms & Conditions:

1 Prices (quoted in Rs.): FOR Deptt. of Chemistry,

IIT Roorkee

2 Payment: Should be clearly mentioned, As per clause-I of tender document.

3 Validity:

4 Delivery period: 5 Other charges: 6 Warranty:

7 Rejection: Equipment if found not as per the required specification would be rejected.

8 Penalty Clause: As per clause-J of tender dcoument.

In case of the non-supply of the item after the acceptance of the work/supply order, the firm will be debarred from any future bidding process of IIT Roorkee for

a period of minimum one year. (Please refer annexure-IV)

9 PBG: In case the total order value of items becomes Rs.25.00 Lakhs or above, 3% of the

total order value in the form of Bank Guarantee or FDR pledged in favor of "The Registrar, IIT Roorkee" is required at the time of installation of the equipment which should remain valid at least during the warranty period plus sixty days. No

interest shall be claimed by the bidder on the PBG submitted.

10 Only GST Exemption Certificate is provided by the Institute (If required).

It is certified that the rate quoted is not over and above (higher side) the rates under RC with the DGS&D or GeM.

Signature	
Name	
Designation	
Seal Of the Firm/Organization	

Details of Institute:

IEC CODE	0100000011	
AD CODE	0001069-2770325	S.B.I., IIT ROORKEE
	0303974-2770324	P.N.B. IIT ROORKEE

1600001360 7of18

DECLARATION

(to be submitted by the vendor/firm on its official letter head)

To,
Registrar,
IIT Roorkee,
Roorkee.

NOOTREE,		
Subject:	Undertaking as per GFR – 2017, Rule 170(iii) in lieu of Bid Security/Earne.	st Money Deposit (EMD)
Tender Ref no:	No. 1600001360/MM-24/IITR/2021-22/Small Molecule single cry/CHEM	Dated 12-Jul-21
Dear Sir,		
Dear Sir,		
	We, the undersigned, offer to Supply the as per tender at IIT Roorkee, in response t	
	We are hereby submitting our proposal/Bid/Quote for the same, which i As a part of eligibility requirement stipulated in above refered tender doe lieu of Earnest Money Deposit (EMD) as given below:	
	1. Our bid shall remain valid for 90-days from the date of financial openin our bid during the validity period,	ng and that we will not withdraw or modify
	2. In case, we are declared as successful bidder and an order is placed on within 7 days of placement of order on us.	us, we will submit the acceptance in writing
	3. In case, we are declared as successful bidder and an order is placed on Bank Guarrantee(PBG) as mentioned in above refered tender document Order.	
	4. In case of failure on our part to comply with any of the above said requested as un-eligible for said tender and /or debarred from any future minimum one year.	
	5. The undersigned is authorized to sign this undertaking.	
		Signature:
		Name:
		Designation:
		Seal Of the Firm/Organization:

1600001360 80f18

(to be submitted by the vendor/firm on its official letter head)

Self-Certificate for Local Content

Tanadan Na	No. 1600001360/MM-24/IITR/2021-22/Small Molecule single	D-41 42 1-1 24
Tender No.:	crv/CHEMISTRY/49	Dated 12-Jul-21

We hereby certify that the items quoted by us against above mentioned tender no. has the local content as per below:

Local Content (in %):
Local Supplier Class:

The details of the location(s) at which the local value addition made/manufactured is/are as under:

1

2

3

Signature:

Name:

Designation:

Seal Of the Firm/Organization:

1600001360 90f18

Instructions for Online Bid Submission

Instructions to the Bidders to submit the bids online through the Central Public Procurement Portal for e Procurement at https://eprocure.gov.in/eprocure/app.

- 1 Possession of valid Digital Signature Certificate (DSC) and enrollment/registration of the contractors/bidders on the e-Procurement/e-tender portal are prerequisite for etendering.
- Bidder should register for the enrollment in the e-Procurement site using the "Online Bidder Enrollment" option available on the home page. Portal enrollment is generally free of charge. During enrollment/registration, the bidders should provide only valid and true information including valid email id. All the correspondence shall be made directly with the contractors/bidders through email id as registered.
- 3 Bidder need to login to the site through their user ID/ password chosen during enrollment/registration.
- Then the Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by SIFY/nCode/eMudra etc. recognized by Controller of Certifying Authorities (CCA) India on eToken/SmartCard, should be registered.
- 5 The registered DSC only should be used by the bidder in the transactions and should ensure safety of the same.
- 6 Contractor/Bidder may go through the tenders published on the site and download the tender documents/ schedules for the tenders.
- 7 After downloading/getting the tender document/schedules, the Bidder should go through them carefully and then submit the documents as required, otherwise bid will be rejected.
- Any clarifications may be sought online through the tender site, through the contact details or during pre-bid meeting if any. Bidder should take into account the corrigendum if any published before submitting the bids online.
- 9 Bidder may log in to the site through the secured login by the user id/ password chosen during enrolment/registration and then by submitting the password of the e-Token/Smartcard to access DSC.
- Bidder may select the tender in which he/she is interested in by using the search option and then move it to the 'my tenders' folder.
- 11 From my tender folder, he may select the tender to view all the details uploaded there.
- It shall be deemed that the bidder has read and understood all the terms and conditions before submitting the offer. Bidder should go through the tender schedules carefully and upload the documents as asked; otherwise, the incomplete bid shall stand rejected.
- Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document/ schedule and ordinarily it shall be in PDF/xls/rar/jpg/dwf formats. If there is more than one document, all may be clubbed together and provided in the requested format. Bidders Bid documents may be scanned with 100 dpi with black and white option. It is advisable that each document to be uploaded through online for the tenders should be less than 2 MB. If any document is more than 2MB, it can be reduced through zip/rar and the same if permitted may be uploaded. The file size being less than 1 MB the transaction uploading time will be very fast.
- The Bidders can update well in advance, the documents such as certificates, annual report details etc., under "My Space option" and these can be selected as per tender requirements and then send along with bid documents during bid submission. This will facilitate the bid submission process faster by reducing upload time of bids.
- Bidder should submit the Tender Fee/ EMD as specified in the tender. Scanned copy of the same should be uploaded as part of the offer. (if applicable)
- While submitting the bids online, the bidder shall read the terms and conditions and may accept the same to proceed further to submit the bid packets.
- The bidder has to select the payment option as offline to pay the Tender FEE/ EMD as applicable and enter details of the same. (if applicable)
- The details of the DD/any other accepted instrument, physically delivered, should tally with the details available in the scanned copy and the data entered during bid submission time, otherwise submitted bid shall not be acceptable or liable for rejection. (If applicable)
- The bidder has to digitally sign and upload the required bid documents one by one as indicated. Every act of using DSC for downloading the bids and uploading their offers shall be deemed to be a confirmation that they have read, understood and agreed with all clauses of the bid document including General conditions of contract without any exception.
- The bidder has to upload the relevant files required as indicated in the cover content. In case of any irrelevant files, the bid may be rejected.

1600001360 10of18

- If the price bid format is provided in a spread sheet file like BoQ_XXXX.xls, the rates offered should be entered in the allotted space only and uploaded after filling the relevant columns. The Priced-bid/BOQ template shall not be modified / replaced by the bidder; else the bid submitted is liable to be rejected for the tender.
- The bidders are advised to submit the bids through online e-tendering system to the Tender Inviting Authority (TIA) well before the bid submission due date and time (as per Server System Clock). The TIA shall not be held responsible for any delay or the difficulties faced during the submission of bids online by the bidders.
- After the bid submission (i.e. after Clicking "Freeze Bid Submission" in the portal), the acknowledgement number indicated by the system should be printed by the bidder and kept as a record of evidence for online submission of bid for the particular tender and also be used as entry pass to participate in the bid opening.
- The time settings fixed in the server side and displayed at the top of the tender site, shall remain valid for all actions of requesting, bid submission, bid opening etc., in the e- Tender system. The bidders should follow such time during bid submission.
- All the data being entered by the bidders would be encrypted using Public Key Infrastructure (PKI) encryption techniques to ensure the secrecy of the data. The data entered is not retrievable by unauthorized persons during the bid submission and until the time of bid opening by any person.
- Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid openers' public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- The confidentiality of the bids is maintained with the use of Secured Socket Layer (SSL) 128 bit encryption technology. Data storage encryption of sensitive fields is done.
- The bidder should logout of the tendering system using the normal logout option available at the top right hand corner and not by selecting the (X) exit option in the browser.
- For any queries regarding e-Tendering process, the bidders may contact at address as provided in the tender document. Parallely for any further queries, the bidders are advised to contact over phone: **0120-4001005** or send an e-mail to cppp-nic@nic.in.

1600001360 11of18

Prequalification

- An undertaking by the firm that it has never been black-listed must be attached along with the Bid, failing which the Bid shall be rejected. (As per Annexure-II)
- 2 True copy of Permanent Account Number.
- 3 Details of GST along with a copy of certificate to be attached.
- Submission of samples if required, for all items indicated in the NIT. The make of items proposed to be supplied should be indicated and submitted along with the techno commercial unpriced bid without indicating the pricing components.
- Willingness to execute all orders which are placed to meet emergency requirement on priority basis. The Bidder shall note that standards for workmanship, material and equipment, and references to brand names designated by the Purchaser in the tender document are intended to be descriptive only and not restrictive. The Bidder may substitute alternative standards, brand names and/or catalogue numbers in his bid, provided that it demonstrates to the Purchaser's satisfaction that the substitutions ensure substantial equivalence to those designated in the Technical Specifications.

1600001360 12of18

Tender Acceptance Letter

(To be given on Company Letter Head)

	Date:
	Sub: Acceptance of Terms & Conditions of Tender.
T	Tender No. 1600001360/MM-24/IITR/2021-22/Small Molecule single cry/CHEMISTRY/49
Tender descr	iption:
Dear Sir,	1 I/We have downloaded/ obtained the tender document(s) for the above mentioned 'Tender No.' from the web site(s) namely:
	as per your advertisement, given in the above mentioned website(s).
	2 I/We hereby certify that I/We have read the entire terms and conditions of the tender documents from Page No. to (including all documents like section(s), schedules(s) etc.), which form part of the contract agreement and I/we shall abide hereby by the terms/conditions/ clauses contained therein.
	3 The corrigendum(s) issued from time to time by your department/ organisation too have also been taken into consideration, while submitting this acceptance letter.
	4 I/We hereby unconditionally accept the tender conditions of above mentioned tender document(s)/ corrigendum(s) in its totality/entirety.
	5 In case any provisions of this tender are found violated, then your department/organisation shall without prejudice to any other right or remedy be at liberty to reject this tender/bid including the forfeiture of the full said earnest money deposit absolutely.
	Yours Faithfully,
	(Signature of the Bidder, with Official Seal)

1600001360 13of18

TENDER SPECIFICATIONS FOR SINGLE CRYSTAL X-RAY DIFRACTOMETER

Small molecule single crystal X-ray diffractometer with the following specifications is required

	1	
S. No.	Items	Technical Specifications
1	Mounting and Cooling Facility:	(a) Floor mounted system for dedicated use in a laboratory which can be used with Molybdenum X-ray source.
		b) The X-ray source and the detector should be air-cooled.
2	Goniometer, Sample and Detector Positioning System:	(a) The instrument should include a fully automated high precision 3-circle goniometer with all axes and detector distance controlled through the system computer.
		(b) The sample to the detector distance should be variable over a range of at least 40 to 180mm or higher.
		(c) The XRD system must be equipped with sample-detector distance detection system in real mode. The sphere of confusion of the goniometer should be less than 7 microns.
3.	X-ray Source:	(a)Mo-Kα micro-focus X-ray source(PhotonJet-S series or IµS3.0 series or better), pre-aligned, maintenance free and designed for continuous operation together with sealed micro focus X-ray generator with all essential and latest generation high performance optics as well as X-ray source for the computer controlled data collection of highest standards.
		(b) The X-ray source must be completely air cooled to provide the highest stability in beam position and beam intensity. The micro-focus X-ray source should have good power output of 50 W or better with minimum flux density/beam intensity ≥ 3x10 ⁹ photons/sq.mm must be quoted. The beam diameter at the crystal should be optimum through use of suitable pinholes / collimators. The X-ray source should comply with statutory safety regulations, with fully X-ray protected enclosure as per international safety norms. The X-ray source should be covered by minimum 5 years replacement warranty from the date of installation.
4.	X-ray Detector:	(a) State-of-the-art detector suitable for Molybdenum X-ray radiation with large active area with highest sensitivity and latest technology. The detector should be based on Charge Integrating Pixel Array Detector (CPAD) / Hybrid Pixel Array(HPAD) / Hybrid Photon Counting(HPC) or better technology with no dead area for detecting the diffracted X-rays and accurately measuring their intensities from the diffraction of single crystals.

May or 106/2021

v. Jacobolan

PASAXXXX

1.59/26

Chemietry Department

14 of 18

		(b). The detector should be able to capture very weak as well as very strong reflections on a single frame. The detector should have high signal to noise ratio with virtually noise free readout electronics and should be capable of shutter-less operation with auto air cooled facility. The active area of detector must be minimum 70 cm ² or larger. The detector should carry a minimum warranty of 5 years from the date of installation.
5.	Computer:	The diffractometer should come with two PCs having required software for data collection and processing. Specifications of the PCs should be the following: Latest LED monitor ≥ 27 inch. PCs: Intel i7 CPU, 1.7 GHz or better, 64 GB RAM, 64bit Operating System, 2 TB HDD, 256 GB SSD, or better. Intel Mother board, graphics card, 16X DVD RW. One of the PCS must have two monitors connected to the same computer.
6	Application Software:	(a) The software provided with the system shall consist of a complete suite of well tested and user proven routines for the collection and integration of frame data on single crystals for solving, refining, and displaying single crystal structures.
		(b) Software shall allow remote access to the instrument including diffractometer, goniometer, and X-ray generator functions to setup the experiment(s), view the data as collected, process the data, solve and refine the structures remotely or off-line.
		(c) Software for auto structure solution, twins, low/high temperature, high pressure, charged density and modulated structure should be included.
		(d) An unlimited number of data integration and analysis software licenses should be available so that all local and remote dependents of the equipment should have the capability to analyze the data independently.
		(e) Manufacturer must offer their latest version of licensed software developed by them. No public domain software is acceptable. There must be an undertaking by the manufacturer that updates to the instrument control/data collection and automated structure solution and refinement software will be provided as and when available free of charge.
		(f) For data collection strategies, the software shall have predefined runs. Optimized runs shall provide completeness / coverage as well as the facility for user defined runs. Software shall allow easy change of exposure time, scan ranges, scan width and detector distance and provide automatic re-measurement of overflow frames, automatic dark image acquisition and optional reference frames for tracking decaying samples.
		(g) The offered data acquisition software package must be compatible with SHELX, WINGX and OLEX2.
		(h). Software for Auto Structure solution should be quoted along with the

(h). Software

XXXXXXXX

Jehr Jehr

Charl # 202106121

15 OF 18

_		
		basic scope.
		(i) Most recent and advanced software for data analysis are required. Atleast50 licenses within the campus for data analysis should be provided.
7.	Sample Cooling Facility:	The X-ray diffractometer should be supplied with a sample cooling device that allows the control of the sample temperature from 80 to 400K with an error not larger than $\pm 1 \text{K}$ over the whole temperature range for data collection. A liquid nitrogen storage tank with 60 or more litres capacity with necessary valves, regulators, transfer line and other accessories should be included. An additional nitrogen storage tank with 150 litres capacity with auto-refill capability should be provided.
8.	Sample Temperature:	The sample temperature should be able to set and varied in a stepwise fashion by the instrument control software to allow for easy variable temperature measurements.
9.	Video Microscope & Illumination:	The system must include a colour video microscope which records colour images of the crystal mounted on the goniometer platform to assist alignment, monitoring, and face-absorption corrections. In addition, provision should be available to transfer and store images.
10.	Polarizing Microscope	A Stereo Zoom microscope for sample selection (preferable Leica make) with the LED illumination, Polariser/Analyser for crystal selection should be quoted with the following specifications.
		Zoom range: minimum 5:1 (0.8X -4 X)
		Magnification range: minimum 8X to 40 X
		Working distance: minimum 100 mm
11.	Consumables:	Following consumables should be quoted and supplied along with the system:
		i. Mounted cryo-loops of different sizes (0.1-0.2, 0.2-0.3, 0.3-0.4, 0.6 mm-100 each) for cryo-mounting.
		ii. Lindeman capillaries made of special glass with outerdiameter of 0.2mm, 0.3mm -50 pcs of each type.
		iii. Four (4) Nos. of Goniometer head in the basic system.
		iv. Paraton N or equivalent Cryo mounting oil – 5 Nos.
		v. Calibrating YLID Standard Crystal or equivalent on Goniometer head – 1 No.
		vi. Magnetic Base to mount on XYZ-Goniometer head. 49/64 mm – 4 Nos.
12.	UPS System:	AsuitableBranded Insulated-gatebipolar transistor (IGBT based) minimum 40 kVA online UPS with built-in isolation transfer and sealed
Q	Markotogor	Pagexaxis Pagexaxis
	02/06/2021	16 OF 18

Chemisery Department

T T		maintenance free (SMF) batteries for back up for complete system and all accessories for uninterrupted data collection for minimum 60 minutes back-up should be quoted.	
13.	Manuals / Circuit- Diagrams and Instruction Sheets:	All the necessary manuals and instruction sheets must be supplied in English for the purpose of service engineer's reference. The offered SCXRD system model should preferably comply with the latest machinery directive, for electrical equipment and electromagnetic compatibility under fully CE compliant guidelines (or equivalent).	
14.	Spares:	Supplier should confirm the availability of spares for next 10 years from the date of installation of the SCXRD. A certificate on the availability of spares for 10 years from the date of installation should be submitted.	
15.	Service Facility in India	Supplier should clearly mention about their service set up in India (preferably in Northern part of India for prompt service support).	
16.	Qualification Criteria of the Instrument:	The data collected in the offered XRD system must be publishable as per the Acta Crystallographica guidelines.	
17.	Pre-Installation Requirement:	Necessary pre-installation advice/requirements should be sent immediately after the placement of the order.	
18.	Installation, Commissioning and Application Training:	Installation and Commissioning to be done free of cost. Operational and application training at site to be provided for minimum 7 working days for a group of technical staff/students from operating the instrument to complete structure determination/solution. There will be minimum two basic pieces of training namely, operational training and after a few months, advanced application training. The advanced application training must be provided by an application scientist having expertiseon the X-ray Crystallography.	
19.	Warranty:	The single crystal X-ray diffractometer system including X-ray tube, detector, cryo-system, and UPS quoted for it should be under comprehensive warranty for five (5) years from the date of installation. The comprehensive warranty should explicitly include all spare parts. If any repair work or replacement of spares needs to be done on site, the manufacturer must confirm this in their quotation. The down time of instrument during warranty period will be excluded from the warranty period. This clause should be included in the warranty certificate.	
20.	Annual Maintenance Contract(AMC):	Annual maintenance contract for five (5) years effective soon after the expiry of the comprehensive warranty period (5 years) should be included in the offer as option.	

Market 2021

Aller 2601

Aller

Chemistry Department

17 OF 18

A	(to the state of t	
21.	Installation in India and Abroad:	FOR to IIT Roorkee must be quoted. Detailed lists of users (minimum 05) in India with contact details for the quoted model should be provided. Preferably, there should be at least one same quoted model installed/ordered in India in the last 3 years. If required, our technical committee members will visit the installation site.
22.	Performance	Satisfactory performance of instrument and after sales service from existing users will be considered by the committee while evaluating the technical bid.
23.	Optional items	The cost for the following must be quoted under optional items.
		(i) Automated high precision 4-circle kappa goniometer with all axes and detector distance controlled through the system computer should be quoted.
		(ii) Facility to isolate the crystal at low temperature, inert atmosphere before mounting the crystal in the X-ray machine should be quoted.
		(iii) Comprehensive warranty for three years for the single crystal X-ray diffractometer system including X-ray tube, detector, cryo-system, and UPS from the date of installationfollowed by Annual Maintenance contract for two years effective soon after the expiry of the comprehensive warranty period should be included in the offer.
		(iv) Suitable man power to operate the entire single crystal X-ray diffractometer system for five years must be quoted.
24.	Vendor should quote their latest and advanced model. The vendor should submit a compliance statement with respect to each and every specification. Any deviation should be mentioned clearly.	

35/29/205/ 35/29/205/

John 2021/21 M. Sazibil

by Department

PXXXXXX