*Tender No: IISc/SSCU/2024/*FT-IR-Spectrophotometer *Date: 09/02/2024*

Global Tender Notification for the Procurement of a High-End Research Grade Fourier Transform – Infra Red (FT-IR) Spectrophotometer with Attenuated Total Reflectance (ATR) Mode and Variable Temperature Liquid Nitrogen based Cryostat (77 K-500 K) interfacing with the FT-IR Spectrometer and accessories.

(Last Date for Submission: March 1st, 2024)

Indian Institute of Science, Bangalore invites the best quotations from the bonafide, resourceful, and eligible manufacturer/exclusive distributor/vendors for the procurement of a *High-End Research Grade Fourier Transform – Infra Red (FT-IR) Spectrophotometer with Attenuated Total Reflectance (ATR) Mode and Variable Temperature Liquid Nitrogen based Cryostat (77 K-500 K) interfacing with the FT-IR Spectrometer and accessories* with the following technical specifications on C.I.P. Bangalore basis (by **Air Freight** only). The quotation should clearly mention the validity of the quote (minimum 90 days validity), terms of delivery, delivery schedule, estimated delivery date, and payment terms. The tender should be submitted in two separate sealed and distinctly marked envelopes: one containing the technical bid and the other containing the commercial bid, both of which should reach us duly signed on or before 17:00 hours, March 1st 2024.

As per the OM No.F.4/1/2023-PPD dated 03-04-2023 on Relaxation on Procurement of Certain Items through GTE, Fourier Transform – Infra Red (FT-IR) Spectrophotometer with Attenuated Total Reflectance (ATR) System (among 364 Medical devices) are exempted from the instructions related to GTE (for details, see the Annexure A of the OM, Sl. No. 19, 21, 32, 187, 189, 190, 191).

The bids should be addressed to:

The Chairman
Solid State and Structural Chemistry Unit
Chemical Sciences Division
Indian Institute of Science (IISc)
Bengaluru, India - 560012
Kind attention: **Prof. Abhishake Mondal**
Email: mondal@iisc.ac.in

The sealed bids should be sent to the following address:

Prof. Abhishake Mondal
Solid State and Structural Chemistry Unit
Room F-213, F-Block, Second Floor
Chemical Sciences Division
Indian Institute of Science (IISc)
Bengaluru, India - 560012
Ph: +91-9932207177
Email: mondal@iisc.ac.in

Please enclose a compliance statement along with the technical bid.

Section 1: Bid Schedule

1.	Tender No	*IISc/SSCU/2024/FT-IR-Spectrophotometer*
2.	Tender date	8th February 2024
3.	Instrument	High-End Research Grade Fourier Transform – Infra Red (FT-IR) Spectrophotometer with Attenuated Total Reflectance (ATR) Mode and Variable Temperature Liquid Nitrogen based Cryostat (77 K-500 K) interfacing with the FT-IR Spectrometer and accessories
4.	Tender type	Global Tender
5.	Documents to be submitted	i) Technical bid (part A) ii) Commercial bid (part B)
6.	Place of tender submission	**Prof. Abhishake Mondal** Solid State and Structural ChemistryUnit Room F-213, F-Block, Second Floor Chemical Sciences Division Indian Institute of Science (IISc) Bengaluru, India – 560012
7.	Last date and time of tender submission	March 1st 2024, 17:00 hours
8.	For Further clarification	**Prof. Abhishake Mondal** Solid State and Structural Chemistry Unit Chemical Sciences Building Indian Institute of Science (IISc) Bengaluru- 560012, India Ph: +91-9932207177 Email: *mondal@iisc.ac.in*

Section 2 - Eligibility Criteria:

Prequalification criteria:

1. All documentation in the tender should be in English.
2. The tender should be submitted in two envelops (two bid systems)
   a) Technical Bid (Part-A) – Technical bid consists of all technical details and a checklist for conformance to technical specifications. The proposal should contain a compliance table with 4 columns in addition to the ones in the technical requirements table that has been included with this RFQ above. The compliance table should include all the items in the same order and format. The first column should describe your compliance in a "Yes" or "No" response. If "No" the second column should state the extent of the deviation. The "third" column should state the reasons for the deviation if any. The fourth column can be used to compare your tool with that of your competitors or provide details as requested in the technical requirements table below. (Suppliers who include any indication of prices in the technical bid will be automatically disqualified).

b) Commercial Bid (Part-B) – Indicating item-wise price for the items mentioned in the technical bid, as per the format of quotation provided in the tender, and other commercial terms and conditions.

3. The technical bid and price bid should be placed in separate sealed covers, superscripting the tender no. and the due date on both envelopes. Both these sealed covers are to be placed in a bigger cover, which should also be sealed and duly superscripted with the Tender No, Tender Description & Due Date.
4. The SEALED COVER superscripting tender number / due date & should reach the office of **Prof. Abhishake Mondal**, Room F-213, F-Block, Second Floor, Solid State and Structural Chemistry Unit, Chemical Sciences Building, Indian Institute of Science, Bangalore – 560012, India, on or before the due date mentioned in the tender notice. In case the due date happens to be a holiday the tender will be accepted and opened on the next working day. If the quotation cover is not sealed, it will be rejected.
5. Notwithstanding anything specified in this tender document, IISc Bangalore, in its sole discretion, unconditionally and without having to assign any reason, reserves the rights:
    a) To accept OR reject lowest tender or any other tender or all the tenders.
    b) To accept any tender in full or in part.
    c) To reject the tender, offer not confirming to the tender terms.

6. The Bidder should sign and submit the declaration of Acceptance of Terms and Conditions as per -Annexure 4.

7. The Bidder must not be blacklisted/banned/suspended or have a record of any service-related dispute with any organization in India or elsewhere. A declaration to this effect must be given as per Annexure 3.

Section 3 - Technical Specifications for *High-End Research Grade Fourier Transform – Infra Red (FT-IR) Spectrophotometer with Attenuated Total Reflectance (ATR) Mode and Variable Temperature Liquid Nitrogen based Cryostat (77 K-500 K) interfacing with the FT-IR Spectrometer and accessories*

Broad System Requirements and Usage:

We are intent to purchase a High-End Research Grade Fourier Transform – Infra Red (FT-IR) Spectrophotometer with Attenuated Total Reflectance (ATR) Mode and Variable Temperature Liquid Nitrogen based Cryostat (77 K-500 K) with the following minimum specifications or better for our lab at the Solid State and Structural Chemistry Unit, Indian Institute of Science, Bangalore. Quoted FT-IR must be future upgradable to FAR IR till 30 cm^{-1} & Near IR till 14,700 cm^{-1}, and upgraded FT-IR must have all beam splitter, beam path, and detector switchovers to be performed under automatic motorized control without any manual realignment following beam splitter change. The following technical criteria are to be met by any High-End Research Grade MID-IR Fourier Transform – Infra Red (FT-IR) Spectrophotometer with Attenuated Total Reflectance (ATR) Mode with beam splitter, beam path and detector switchover under automatic motorized control and Variable Temperature Liquid Nitrogen based Cryostat interfacing with the FTIR Spectrometer and accessories that being quoted under this notice:

1) Access to the quoted instrument should be multi-user friendly with an easy-to-use software interface and modular hardware design that allows rapid user training. It should also be easy to change from one operational mode to another with relative ease so that our students can set up experiments and handle the instrument.
2) In addition, the system being quoted should have a modular design, providing the flexibility to support upgradation for the possibility of integrating future updates either at the time of procurement or at a later date.

Principal: Supply and installation of a computer-controlled, user-friendly compact High-End Research Grade MID-IR Fourier Transform – Infra Red (FT-IR) Spectrophotometer with Attenuated Total Reflectance (ATR) Mode with a beam splitter, beam path, and detector switchover under automatic motorized control and Variable Temperature Liquid Nitrogen based Cryostat interfacing with the FT-IR Spectrometer and accessories with the modular hardware design for the measurement of IR spectra for different kinds of samples such as polycrystalline, single crystalline, powders, thin films, nano-crystalline and liquid samples.
The Liquid Nitrogen Variable Temperature Cryostat should have the modified base plate and side mount for interfacing with the Bruker INVENIO-S Fourier Transform Infrared Spectrometer or PerkinElmer frontier MIR/NIR/FIR Spectrometer and modified integration mount for interfacing with PerkinElmer UV-Visible spectrometer (Lambda 750, 950 and 1050+). The Variable Temperature Liquid Nitrogen Cryostat should be operable in the temperature range of 77 K to 500 K with temperature stability of ± 50 mK. It should come with all the essential components such as **solid and liquid sample holders**, heating elements, temperature sensors, and cryostat windows with specifications given below. The modular hardware design and software upgrade for the system is

essential so that we can add these new measurement capabilities in the future. However, this modular design should be multi-user-friendly so that the user can change the measurement probes rapidly and with minimal training.

The bid should also include necessary accessories for day-to-day uninterrupted routine operations. A compliance statement with all the specifications below must be attached to the bid. Printed literature and published papers in well-recognized international peer-reviewed journals in support of all compliance to the prescribed specifications should be provided.

Detailed Specifications:

a) Spectrometer:

I. Spectrometer Design

• The manufacturer must have ISO 9001 certification for the design, manufacture, and service of the FT-IR instrument.

• The spectrometer must utilize a rotary interferometer, providing inherent immunity to mirror tilt and shear and requiring no scanning mirror dynamic alignment. Dynamically aligned interferometers are not acceptable due to their inherent poor parallelism and lack of stability, and corner cube designs are not acceptable due to their inherent alignment complexity. The interferometer must be permanently aligned, high stability, wear-free design with 10 years warranty on scanning mechanism.

• Instrument must offer an integrated methane gas cell to ensure high instrument-to-instrument stability and better line-shape calibration technology.

• The system must be a sealed and desiccated optical unit covering the 8,300 – 340 cm^{-1} wavelength range.

• The system must incorporate a vibration-isolated baseplate.

• The system must incorporate kinematically mounted, zero-alignment optics. Kinematic in this context means that the component mounts precisely and unambiguously with zero play in its location. Pinned-in-place optics are not as precise and may have free play in the location; they are more susceptible to thermal effect and are therefore not acceptable.

• The mid-IR source must be pre-aligned and incorporate electronic stabilization. Stabilization must change the polarity through the source frequently to give the system higher sensitivity and increased performance.

• Must have a Hot-spot stabilized source. Without stabilization, the hot spot can move out of the field of view of the optical system. Although the source is still apparently working, the energy seen by the detector drops radically. Changes in the energy uniformity will cause the instrument's wavenumber scale to drift and the source to require premature replacement.

• The source must be of high quality, high performance, and longer life with 5 years warranty should be supplied to cover MIR range.

• The source must be user-replaceable to help maintain a lower cost of ownership.

• The system must include a continuously variable J-stop that is fully software-controlled.

• The variable J-stop to provide the highest measurement accuracy and optimal throughput at intermediate resolutions, not just vendor-determined resolutions.

• The system must include an automated optical filter wheel containing traceable validation materials to allow instrument performance verification on the Mid spectral regions. The software-

controlled validation wheel must contain a polystyrene reference material, traceable to a NIST standard for wavenumber accuracy, and a Schott NG11 filter for ordinate repeatability.

• The system must include a multi-layer potassium bromide beamsplitter for the Mid-IR spectral region.

• The system must utilize high reflectivity, Germanium coated reflecting optics incorporating low angle off-axis design for optimal throughput.

• The detector cooling mechanism must be clearly mentioned, and all necessary requirements for detector cooling must be supplied and met by the vendor.

• The system must be configurable for other detector options in the future, including a liquid nitrogen-cooled MCT.

• The system must offer an optional external general-purpose optical bench designed for more advanced or specialized applications, which would be difficult to perform using the standard sample compartment.

• The system must include HeNe or Diode laser with minimum 10 years warranty from the date of successful installation.

• The system must have a future upgrade option to add fast scanning for time-resolved measurements, with the ability to collect spectra at > 95 scans/second.

II. System Performance

• The vendor must demonstrate Wavelength accuracy at least ± 0.02cm^{-1} at 2000 cm^{-1} or better

• The vendor must demonstrate **Peak-peak signal-to-noise of greater than 15,000:1 for a 5 second and 50,000:1 for 1 minute scan, 4 cm^{-1} scan** or better.

• Resolution: 0.4 cm^{-1} or better.

• Photometric accuracy: better than 0.1% T

• Spectra rate: max 25 spectra per second at 16 cm^{-1} optical resolution. The system should be future upgradable to 70 spectra/sec at 16 $cm^{-1,}$ and Step-scan option should be available at a temporal resolution of 6 µs.

• The system must include temperature stabilized, fast-recovery $LiTaO_3$ or DTGS detectors, Preamp PCB; optimized for Mid-IR.

III. Upgradeability

- The system must offer a large sample area providing plug-and-go capabilities for a wide range of Mid-sampling accessories.
- Future upgrade for high-performance IR Microscopes or imaging systems allows the identification of tiny impurities in virtually any matrix. Users may wish to add these in the future.
- This ATR must operate between 8300 to 350 cm^{-1} with this MID IR FT-IR, with the possibility of upgrading Main FT-IR to FAR IR in the future between 8300 to 30 cm^{-1}.
- FT-IR Equipment should be readily upgradable for Evolved Gas Analysis like TGA-FT-IR, TGA-FT-IR-GCMS, FT-Raman Module, IR Microscope, preferred from the same manufacturer.
- The instrument should be capable of upgradation to incorporate an Electrochemical cell and MCT Detector as part of future upgradation.

- Quoted FTIR must be readily compatible with Variable Temperature Cryostat. This accessory is used by us for Transmission study of Samples with Temperature setting range 77 K to 500 K.
- The system should be upgradable to 0.2 cm^{-1} or better spectral resolution.
- Time-Resolved Spectroscopy using Rapid Scan technique for achieving up to 70 spectra/sec at 16 cm^{-1} resolution.

IV. Required Accessories:

- **ATR Diamond** Extended Range: 8300 to 40 cm^{-1}, must have a single-reflection ATR, specializes in mid- and far-infrared analysis. With innovative optical design and **durable monolithic diamond ATR crystal**.
- Rechargeable Desiccant – Pack of 4 or more.
- The quote should also include the required suitable DELL Computer. Suitable Dell Computer: windows 10 OS and 21" Colour Monitor, Intel Core i7- 11500 11th Gen Processor,16 GB RAM, 2 TB SDD or better.
- Quote suitable Universal Liquid Cell Holder with 0.1 mm, 0.2 mm & 0.5 mm Spacer with rectangular windows for Liquid Transmission study. This must have NaCl / KBr Liquid Windows Rectangular Size with 1 drilled & 1 undrilled.
- One set of spares like Mid-IR Source Lamp, spare replaceable detector $LiTaO_3$ or DTGS, Preamp PCB must be included.
- FT-IR Equipment with these Accessories should **be offered with 3 years warranty from the date of installation**.

b) Technical Specifications for Liquid Nitrogen Variable Temperature Cryostat

Items	Specification
Operating Temperature range	77 K – 500 K
Temperature stability	± 50 mK or better
liquid N_2 storage	• Minimum 0.4 L Nitrogen reservoir with built in charcoal getter
Refilling of liquid N_2	• Funnel for filling reservoir • Refill displacer assembly (to permit refill without affecting temperature control)
Compatibility	• The instrument should have modified base plate and slide mount for interfacing the cryostat with Bruker INVENIO-S Fourier Transform Infrared Spectrometer or PerkinElmer frontier MIR/NIR/FIR Spectrometer. • The instrument should also have modified integration mount for interfacing with PerkinElmer UV-Visible spectrometer (Model: Lambda 750, 950 and 1050+)

Essential accessories	Instrumentation skirt with one 10-pin electrical feedthrough for heater and sensor wires and three blank ports, an evacuation valve, and a safety pressure relief valve
Sample holder	• Gold plated OFHC copper optical sample holder with M3 tapped hole for temperature sensor. • Sample holder should be provided, and it should be capable of holding KBr pellet and thin film
Liquid sample holder	• Special 3-piece liquid cell sample holder • Four pairs of O-rings and UV-vis-NIR grade windows for liquid sample holder should be included
Sample space	• Sample should be under Vacuum • 3.0" O.D. sample area with 1.25" diameter sample mount.
Heater	50-ohm control heater
Temperature sensor	Standard curve silicon diode temperature sensor
Cryostat windows	• Outer shroud with 3.25" square window block • Four 1.63" diameter parallel IR-grade KBr windows (49 mm diameter (+/-0.2 mm), 6 mm thick (+/-0.5 mm)) • Four 1.63" diameter clear view plane parallel UV-vis-NIR grade fused silica or quartz windows • Four aluminium **window blanks** to be included
Warranty and AMC	Warranty of minimum 36 months from the date of Installation

Additional requirements need to be included:

1) The cryostat must also include Four (4) special retainers for mounting 6 mm thick windows on cryostat.
2) The cryostat must be able to hold liquid nitrogen for at least 8 hours at 77 K.
3) Cryostat should be compatible for new procurement of FT-IR Spectrometer (*vide supra*) and the existing FT-IR (Model no: PerkinElmer FT-IR MIR Frontier) and UV-vis-NIR spectroscopy (Model no: PerkinElmer LAMBDA 750, 950, and 1050+) measurement which will be carried out for all three types of samples: KBr pellet, thin film, and liquid sample.
4) All types of electrical connections between the temperature controller and cryostat should be done by the vendor.

Optional item: The following items should be quoted as optional item in the price bid

1. Quick Press KBr Pellet Kit

2. Specac Mini Pellet Press

3. Specac Limited UK make Omni Cell, KBr Liquid Omni Windows pair rectangular, PTFE Spacers (5 pcs.), Silica (IR) Liquid Omni Windows pair rectangular

4. Temperature controller:

- Should operate down to 4 K with appropriate sensors.
- Two independent diode/resistor input channels
- Two independent heater output loops (1st loop 25 W max banana plug output; 2nd loop 2 W max detachable terminal block)
- Autotuning PID, audible and visual alarms, and relays.
- GPIB (IEEE-488) parallel computer interfaces.
- Should include a serial RS-232C port
- Cable to connect the cryostat
- Power requirement: 100, 120, 220, or 240 VAC, (+6%, -10%), 50 or 60 Hz

5. Turbo pumping station

- Turbomolecular pump with nominal 47 liter/second capacity.
- 0.8 CFM dry diaphragm backing pump.
- All mounting frame with rubber feet and cutouts for easy handling.
- Wide range vacuum gauge (atmosphere to 10^{-6} Torr) with digital display.
- Controller with integral air cooler, digital display of turbo speed, and input for one vacuum gauge
- 5-foot flexible stainless-steel pumping line.
- Vacuum isolation valve.
- Power Requirement: 100 - 240 VAC, 50/60 Hz

Section 4 - Terms and Conditions

1) Comprehensive 3-year minimum on-site warranty with additional 3 years on all parts from the date of successful installation.
2) The vendor must quote for a non-comprehensive Annual Maintenance Contract (AMC) price beyond the 3-year warranty, with a price lock in for 3 years beyond the standard 3-year warranty period, 2-3 services per year should be included in the AMC. AMC should be clearly mentioned after the warranty period.
3) The tender document should also indicate what kind of service/maintenance is required for the system. Also mention that whether the service has to be carried out by a company engineer or it can be carried by trained service personnel within India.
4) Power requirement: Indian standard power supply, 220/240 Volts AC with frequency 50 Hz.
5) Operation and service manual in English (electronic and hard copy) with complete circuit diagram and PCB layout for all equipment should be provided with the instrument.
6) Standard samples (if required) to be provided by the company for testing the instruments at the time of installation on site to the quoted accuracy in the given technical specification for the demonstration of the performance of equipment.
7) Pre-installation site preparation requirements to be indicated and specified along with the bid.
8) Installation and on-site training of our staff (minimum three training courses with minimum three sessions each) in operation and maintenance are essential by factory trained personal free of cost.
9) Please provide the segmented quotation for each optional measurement capabilities. Depending upon the budgetary provision and priority, the items to be purchased will be decided.
10) Bid should include all other essential auxiliary equipment and spares for its operation, even which are not explicitly specified above (please provide list with details).
11) All sample handling kits/consumables should also be provided.
12) The vendor is responsible for the complete and successful installation of the system at the institute.
13) The price quotation should include the cost of installation and training of potential users.
14) GST is applicable as per Govt. of India GST law and must be mentioned in the price bid. In case due to any error / oversight, the GST quoted by the bidder is less than the actual rate as per tariff, the bidder will not be permitted to rectify the error/oversight. The orders / contract will be placed for the total amount including the (lower) rate/s quoted by the bidder, with reduced basic amount to the extent of difference in tax/duty amount, so that the total amount (basic + actual rate as per tariff), remains same (quoted basic + quoted rate). The difference amount payable, if any, between the quoted rate and actual rate as per tariff shall be borne by the bidder.
15) The vendor should have a track record of having previously supplied at least five

identical instruments in CFTIs such as JNCASR, IITs, IISERs, NITs with above mentioned specifications. **Details of such systems should be provided.** Vendor must provide the user list (with contact details including emails and phone numbers) of at least 5 customers from Indian Institutes/Labs with contact person name, address, phone, fax and email Ids should be provided. The primary focus of these installed systems should have included reliable data in the form of pictorial graphs, temperature dependent spectra must be provided.

16) List of 20 publications (separately for FT-IR Spectrometer and Variable Temperature Cryostat) in highly renowned international peer reviewed journals should be provided.
17) The committee reserves the right to reject the technical bid if the above condition is not satisfied.
18) The vendor should have qualified technical service personnel for the equipment based in India and should assure a response time of <48 hours.
19) The lead-time for the delivery of the equipment should not be more than 3 months from the date of receipt of our purchase order.
20) If the supplier fails to Supply, Install and Commission the equipment as per the specifications mentioned in the PO within the due date, the Supplier is liable to pay a penalty of @ 0.5% of order value per week of delay subject to a maximum of 10% beyond the due date. IISc reserves the right to cancel the order in case of excessive delay.
21) The indenter reserves the right to withhold placement of final order. The right to reject all or any of the quotations and to split up the requirements or relax any or all of the above conditions without assigning any reason is reserved.
22) Wherever requested data must be supplied along with technical compliance documents. Technical bids without supporting data will be deemed technically non-compliant.
23) All guaranteed specifications may have to be demonstrated at the time of installation. Any necessary standard samples for that purpose should be brought by the service engineers.
24) The vendor must provide a compliance statement in a tabular form concerning each technical specification in the tender document duly supported by the manufacturer's literature and published papers. Any other claim will not be accepted and may lead to rejection of the bid.
25) Technical evaluation by the institute may include a demonstration to verify functionalities and capabilities of the system quoted. The institute reserves the right to provide samples after opening the technical bids for verification of promised specifications. Any discrepancy between the promised specifications and measurements will be deemed as technical non-compliance. Committee also reserves the right to modify the stipulated eligibility criteria at any time during the tenure of procurement.
26) The quote should also include additional spares sufficient for 3 years.
27) Any statutory increase in the taxes and duties subsequent to bidder's offer, if it takes place within the original contractual delivery date, will be borne by IISc, Bangalore subject to the

claim being supported by documentary evidence. However, if any decrease takes place the advantage will have to be passed on to IISc, Bangalore.

28) Any information furnished by the bidder found to be incorrect, either immediately or at a later date, would render the bidder liable to be debarred from tendering/taking up of work in IISc, Bangalore.
29) All Imported items should be shipped on C.I.P. Bangalore basis (by ***Air Freight*** only).
30) All quotations must be valid for at least 90 days at the time of submission.
31) When a foreign vendor does not have a local agent in India, he can submit a demand draft equal to 2% or wire transfer the amount to our account as detailed in the attachment (Annexure II) and enclose the proof with the financial bid.
32) **Payment:** - No Advance payment will be made for Indigenous purchase. However, 90% Payment against Delivery and 10% after installation are agreed to wherever the installation is involved. In case of import supplies the payment will be made only through 100% Letter of Credit i.e., (90% payment will be released against shipping documents and 10% after successful installation wherever the installation is being done). Any loss due to fluctuation in foreign exchange rates will be at the beneficiary account.
33) **Performance Security: -**The successful bidder should submit Performance Security for an amount of 5% of the value of the contract/supply within 21 days from the issue of work/purchase order. The Performance Security should be furnished in the form of an Account Payee DD / FD Receipt from the commercial bank (or) Bank Guarantee from any nationalized bank in India.
34) **Accept /Reject**: IISc Bangalore reserves the full right to accept / reject any tender at stage without assigning any reason.
35) **Settlement of Disputes:** Any legal disputes arising out of any breach of contract pertaining to this tender shall be settled in the court of competent jurisdiction located within the city of Bangalore in Karnataka.
36) **Risk Purchase Clause:** - In the event of failure of supply of the item/equipment within the stipulated delivery schedule, the purchaser has all the right to purchase the item/equipment from other sources on the total risk of the supplier under risk purchase clause.

Annexure 1:

Details of the Bidder: The Bidder must provide the following mandatory information & attach supportingdocuments wherever mentioned:

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

Signature of the Bidder

Name: Date:

Designation, Seal

Annexure 2:

Declaration regarding experience

To,
Prof. Abhishake Mondal,
Solid State and Structural Chemistry Unit,
Chemical Sciences Building,
Indian Institute of Science,
Bangalore – 560012, India

Ref: Tender No: XXXXXXXXX

Dated: XXXXX

Supply and installation of High End Research Grade MID-IR Fourier Transform – Infra Red (FT-IR) Spectrophotometer with Attenuated Total Reflectance (ATR) Mode and Variable Temperature Liquid Nitrogen based Cryostat (77 K-500 K) interfacing with the FT-IR Spectrometer and accessories

Sir,

I have carefully gone through the Terms & Conditions contained in the above referred tender. I hereby declare that my company / firm has years of experience in supplying and installing High-End Research Grade Fourier Transform – Infra Red (FT-IR) Spectrophotometer with Attenuated Total Reflectance (ATR) Mode and Variable Temperature Liquid Nitrogen based Cryostat (77 K-500 K) interfacing with the FT-IR Spectrometer and the PerkinElmer UV-Visible spectrometer (Model: Lambda 750, 950 and 1050+) and accessories.

(Signature of the Bidder)

Printed Name Designation, Seal Date:

Annexure 3:

Declaration of track record

To,
Prof. Abhishake Mondal,
Solid State and Structural Chemistry Unit,
Chemical Sciences Building,
Indian Institute of Science,
Bangalore – 560012, India

Ref: Tender No: XXXXXXXXX

Dated: XXXXX

Supply and installation of High-End Research Grade Fourier Transform – Infra Red (FT-IR) Spectrophotometer with Attenuated Total Reflectance (ATR) Mode and Variable Temperature Liquid Nitrogen based Cryostat (77 K-500 K) interfacing with the FT-IR Spectrometer and accessories.

Sir,
I have carefully gone through the Terms & Conditions contained in the above referred tender.

I hereby declare that my company / firm is not currently debarred / blacklisted by any Government / Semi-Government organizations / institutions in India or abroad. I further certify that I am competent officer in my company / firm to make this declaration.

OR

I declare the following:

Sr. No.	Country in which the company is debarred/ blacklisted / having pending case	Blacklisted / debarred by Government / Semi Government Organizations or Institutions / having pending case	Reason	Time Period

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

(Signature of the Bidder)
Printed Name Designation, Seal Date:

Annexure 4:

Declaration of acceptance of terms and conditions

To,

Prof. Abhishake Mondal,
Solid State and Structural Chemistry Unit,
Chemical Sciences Building,
Indian Institute of Science,
Bangalore – 560012, India

Ref: Tender No: XXXXXXXXX

Dated: XXXXX

Supply and installation of High End Research Grade MID-IR Fourier Transform – Infra Red (FT-IR) Spectrophotometer with Attenuated Total Reflectance (ATR) Mode and Variable Temperature Liquid Nitrogen based Cryostat (77 K-500 K) interfacing with the FT-IR Spectrometer accessories.

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

Yours faithfully
(Signature of the
Bidder)

Printed Name Designation, Seal Date:

Commercial Bid:

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

The Chairman
Solid State and Structural Chemistry Unit
Chemical Sciences Division
Indian Institute of Science (IISc)
Bengaluru, India - 560012
Kind attention: **Prof. Abhishake Mondal**
Email: mondal@iisc.ac.in

The sealed bids should be sent to the following address:

Prof. Abhishake Mondal
Solid State and Structural Chemistry Unit
Room F-213, F-Block, Second Floor
Chemical Sciences Building
Indian Institute of Science (IISc)
Bengaluru, India - 560012.
Ph: +91-9932207177
Email: mondal@iisc.ac.in

S. No	Description	Cat. Number	Quantity	Unit Price	Sub Total
1.	Essential items noted in the technical specification				
1.a	(details of essential items)				
1.b					
2.	Optional items noted in the technical specification				
2.a	(details of essential items)				
2.b					
3.	Accessories for operation and installation				
4.	All consumables, spares and software to be supplied locally				
5.	Warranty (3 years)				
6.	AMC 3 years beyond				

	warranty				
8.	CIP/CIF IISc, Bengaluru				

Any additional items, such as Spares and Hardware/PCBs Likely to go obsolete after the next 3 Years

Section 5: Checklist

(This should be enclosed with a technical bid- Part A)
The following items must be checked before the bid is submitted:

1. **Sealed Envelope "A": Technical Bid**
   Technical bid (each page signed by the authorized signatory and sealed) with the below annexures:
   a. Annexure 1: Bidders details
   b. Annexure 2: Declaration regarding experience
   c. Annexure 3: Declaration of track record
   d. Annexure 4: Declaration of acceptance of terms and conditions
   e. Annexure 5: Details of item quoted
   f. Declaration of Local Content by Local supplier

2. Copy of this tender document duly signed by the authorized signatory on every page and sealed.
3. **Sealed Envelope "B": Commercial Bid**

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