

IISc/SSCU/2023

Request for quote (RFQ) from Global manufacturers for a 400 MHz Solid-State NMR spectrometer probe with optical fiber for light irradiation

Tender Opening Date: 26th December 2023

Date for Pre-Bid Clarifications: 8th January 2024

Date for Posting for Final Revised Tender: 11th January 2024

Date for Final Bid Submission: 26th January 2024

This is an RFQ for procurement of a Magic Angle Spinning solid-state NMR Probe equipped with an optical fiber (**GTE Approval F. No. 51-03/2023-TS.VII**) for light irradiation on the sample during NMR experiments. The probe should be compatible with an existing 400 MHz Bruker Solid-State NMR Spectrometer System installed at the Solid-state and Structural Chemistry unit of the Chemical Sciences Division at the Indian Institute of Science, Bangalore.

The quotation should clearly indicate the terms of delivery, installation, delivery and installation schedule, estimated date for commissioning and validation, and payment terms. **The tender should be submitted in two separate sealed envelopes - one containing the technical bid and the other containing the commercial bid, both of which should reach us, duly signed on or before 5 PM (IST), 26 Jan 2024.**

The quotations should be on CIP-IISc Bangalore basis in USD only.

The bids should be addressed and sent to:

The Chairman,

Solid State and Structural Chemistry Unit

Indian Institute of Science (IISc)

Bengaluru, India - 560012.

Ph: +91-80-2293-2651

Emails regarding any technical clarifications/queries should be sent to: skj@iisc.ac.in

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Technical Specifications and Requirements

I. Specifications and Requirements for the Probe

- I.1. The MAS-NMR probe should be compatible with Bruker 400 MHz wide bore (89 mm) AVANCE NEO spectrometer.
- I.2. The probe should be able to provide a maximum spinning frequency in range 40-60 kHz and sample volume of 10 ul or more.
- I.3. It should be tunable to triple resonance mode preferable but the minimum requirement is double resonance mode tunability.
 - I.3.1. The high frequency channel should allow simultaneous tuning to ^1H and ^{19}F frequencies whereas the range of the for X-channel should be 76 - 165 MHz for specifically to the isotopes (^{31}P , ^7Li , ^{11}B , ^{71}Ga , ^{23}Na , ^{51}V , ^{27}Al , ^{13}C , ^{79}Br , ^{55}Mn , ^{121}Sb , ^{59}Co , ^{113}Cd , ^{195}Pt , ^{207}Pb , ^{29}Si and ^{77}Se) and Y in range 28 - 71 MHz specifically to the isotopes (^{209}Bi , ^2H , ^6Li , ^{17}O , ^{133}Cs , ^{123}Sb , ^{15}N , ^{35}Cl , ^{33}S and ^{14}N).
 - I.3.2. In case of double resonance probe the whole range should be 28-165 MHz to cover all the desired isotopes.
 - I.3.3. If there are any additional components required, such as circuit inserts, tuning rods or tuning box, for frequency shifting to cover the entire range then those should be provided with the probe.
- I.4. The probe should be equipped with a single mode optical fiber with a fiber coupler for light irradiation on the sample while spinning at magic angle during the NMR experiments.
- I.5. The probe should have VT capabilities with temperature range -50 to 80 $^{\circ}\text{C}$.
- I.6. At least 20 pieces of rotor sets (rotors and end caps) together with 3 sets of packing and opening tool kits should be provided. 10 out of the 20 rotors should be sapphire rotors.
- I.7. The probe should be compatible with the low temperature experiments using liquid nitrogen heat exchanger and transfer line attachable to the probe.
- I.8. The gas flow and heater temperature should be controlled via software and should be capable of the automatic temperature stabilization.
- I.9. The software should support liquid nitrogen temperature accessories.

II. Installation

- II.1. The quote must include the cost of shipping of all the parts and their installation.
- II.2. The training and help for setting up initial experiments should be included in the cost.

III. Warranty

- III.1. A 1 year warranty on all parts of the probe.
- III.2. This should include any repair needed to get the probe back up and running, cost of site visit, labour, travel, shipping as well as remote guidance if needed.

IV. Terms and conditions

- IV.1. The price quotation should include the cost of installation, validation and training of potential users.
- IV.2. The system should be provided with at least **1-years of warranty**, on all parts and labour, from the date of installation.
- IV.3. The vendor must provide routine maintenance of the associated equipment that is part of this tender.
- IV.4. The vendor should have qualified technical service personnel for the equipment and should assure a response time of less than 48 hours.
- IV.5. Vendor must provide a user list (with contact details including emails and phone numbers) of at least 5 global customers where similar systems have been installed.
- IV.6. The lead-time for the delivery of the equipment should not be more than 6 months from the date of receipt of our purchase order.
- IV.7. 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.
- IV.8. Wherever requested data must be supplied along with technical compliance documents. Technical bids without supporting data will be deemed as technically non-compliant.
- IV.9. All guaranteed specifications will have to be demonstrated at the time of installation.
- IV.10. Printed literature and published papers in support of all compliance to the prescribed specifications may be provided.
- IV.11. Technical evaluation by the institute may include demonstration to verify functionalities and capabilities of the system quoted. Any discrepancy between the promised specifications and measurements will be deemed as technical non-compliance.
- IV.12. The Bidder's firm should have existence for a minimum of 3 years. Enclose Company Registration Certificate and balance sheet of last three years.
- IV.13. The bidder should sign and submit the declaration for Acceptance of Terms and Conditions as per -Annexure 4.
- IV.14. 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 has to be given as per Annexure 3.

Check List to Be Submitted Along with Technical Bid

Please Attach Documents in the order given below.

S.No.	Section Title	Document Provided (Yes/No).	Document Page Number(s)
1.	Signed Check List for Technical Bid (this page)		
2.	Annexure-1: Details of the Bidder		
3.	Annexure-2: Declaration regarding experience		
4.	Annexure-3: Declaration regarding track record		
5.	Annexure -4: Declaration for acceptance of terms and conditions		
6.	Annexure-5: Technical Compliance Sheet		
7.	Annexure-6: Make and Manufacturer Details		
8.	Masked Price Bid (Note that the pricing information should be masked)		
9.	Technical specifications, Brochures and additional certifications where required		

I hereby declare all of the above requested documents are appended along with the technical bid. I understand that the bid will be considered unresponsive if any of the above requested information is missing. I also understand that any bids with pricing information in the technical bid documents will be considered unresponsive.

(Signature of the Bidder)

Printed Name

Designation, Seal Date:

Check List to Be Submitted Along with Commercial Bid

Please Attach Documents in the order given below.

S.No.	Section Title	Document Provided (Yes/No).	Document Page Number(s)
1.	Signed Check List for Commercial Bid (this page)		
2.	Commercial Bid		
3.	Costing Sheet for AMC for 2 years beyond the mandatory 1-Year warranty Period		

I hereby declare all of the above requested documents are appended along with the commercial bid. I understand that the bid will be considered unresponsive if any of the above requested information is missing.

(Signature of the Bidder)

Printed Name

Designation, Seal Date:

Annexure-1: Details of the Bidder

The bidder must provide the following mandatory information & attach supporting documents wherever mentioned:

Details of the Bidder

Sl. No	Items	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
Designation, Seal

Date:

Annexure-2: Declaration regarding experience

To,
The Chairman,
Solid State and Structural Chemistry Unit,
Indian Institute of Science,
Bangalore – 560012, India

Ref: Tender No:

Dated:

Sir,

I've 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 solid-state NMR probes.

(Signature of the Bidder)

Printed Name

Designation, Seal Date:

Annexure-3: Declaration regarding track record

To,
The Chairman,
Solid State and Structural Chemistry Unit,
Indian Institute of Science,
Bangalore – 560012, India

Ref: Tender No:
Dated:

Sir,
I've 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'm competent officer in my company / firm to make this declaration.

Or

I declare the following

Sl.No	Country in which the company is Debarred /blacklisted / case is Pending	Blacklisted / debarred by Government / Semi Government/Organizations /Institutions	Reason	Since when and for how long
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(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).

Yours faithfully
(Signature of the Bidder)

Name
Designation, Seal

Date:

Annexure – 4: Declaration for acceptance of terms and conditions

To,
The Chairman,
Solid State and Structural Chemistry Unit,
Indian Institute of Science,
Bangalore – 560012, India

Ref: Tender No:

Dated:

Sir,

I've carefully gone through the Terms & Conditions as mentioned 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'm an authorized signatory of my company and am, therefore, competent to make this declaration.

Yours faithfully,

(Signature of the Bidder)

Name

Designation, Seal

Date: