

TATA INSTITUTE OF FUNDAMENTAL RESEARCH

Plot No.36/P, Gopanpally Village, Serilingampally Mandal, Ranga Reddy District.
Hyderabad - 500 107, Telangana, India.

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Website: www.tifrh.res.in

Date: 08-02-2018

Notice Inviting Tender cum Tender Document (Two Part Public Tender) for the following items:

Supply, Installation, Commissioning of 600 MHz State of the Art Wide Bore NMR Spectrometers to Carry out High Resolution NMR Experiments in Solid State for TIFR Hyderabad.

As per our technical specifications: **Qty. - 1 No.**

Public Tender No.	TFR/PD/IC17-02/F-518/217001
Published on	09-02-2018
Tender Fees	For Indian Supplier - Rs. 700/- For Foreign Supplier-USD 100
EMD	For Indian Supplier - Rs. 20,00,000/- For Foreign Supplier - USD 31000
Estimated Cost	Rs. 1000 Lakhs
Last Date for Submission of Bid	06-03-2018 upto 13.00 Hrs.
Date of Opening Bids(Part A)	06-03-2018 at 15.00 Hrs.

Both Technical Bid (Part A) and Financial Bid (Part B) to be submitted within the due date and time in separate envelopes and marked on top as Part A and Part B. These two sealed envelopes should be further put in one Master Envelope super scribed with the Tender No., Due Date in Bold Letters.

Please see attached sheet for conditions of tender.

**ADMINISTRATIVE OFFICER
(PURCHASE SECTION)
TIFR, HYDERABAD**

SCOPE OF SUPPLY - ANNEXURE A

Technical Specifications for 600 MHz State of the Art Wide Bore NMR Spectrometers to Carry out High Resolution NMR Experiments in Solid State

Item 1: 600 MHz state of the art wide bore NMR spectrometer with three channels to carry out high resolution NMR experiments *in solid state*.

BASIC SPECTROMETER.

I. *Superconducting magnet:*

- a) Wide bore size (89mm)
- b) Operation field corresponding to 600 MHz ¹H frequency (14.1 Tesla)
- c) Shielded magnet axial 5G line less than 1.5 meters and radial 5G line less than 3.0 meters.
- d) Suitable vibration isolation post to damp frequency above 3Hz for acquiring artifacts free data collection
- e) All support equipment for magnet. (Liquid Helium transfer lines, O rings, coupling attachments, spares, etc.)
- f) Helium and nitrogen level meters.
- g) Liquid Helium hold time ~150 days. (Refill volume and total volume should be specified.)
- h) Liquid Nitrogen hold time of minimum 14 days. (Refill volume and total volume should be specified.)
- i) High performance Cryo and RT shim systems for optimal line shape

II. Console:

- a) 3 channel architecture suitable for triple resonance experiments with possibility of upgradation.
- b) Broad-banded frequency generation for all channels.
- c) Communication between all channels by appropriate communication system.
- d) Receivers (Digital) with excellent detection capability and elimination of artifacts such as quadrature images with control unit having state of the art technology for signal acquisition, over sampling, digital filtering etc.
- e) ADC with Band Width 5 MHz or more.
- f) Preamplifiers for multinuclear observation on all three channels with all necessary filters for noise and artifact reduction.
- g) Frequency, phase, and amplitude shaping capability with simultaneous switching of the parameters possible in < 50 ns
- h) Linear broadband 1KW amplifiers for all the three channels.
- i) Variable temperature set up from -150°C to $+200^{\circ}\text{C}$ with a resolution of 0.1°C
- j) A high-end workstation: with latest configuration (minimum of 8GB RAM, minimum hard disk capacity 1TB (2 Nos), 22" or bigger TFT Monitor, latest available processor, printer and other necessary accessories).

III. Software

- a) Latest available Linux based software for NMR acquisition and data processing
- b) Free updates for a period of 10 years.

IV. Pneumatic Unit

- a) Fully automated pneumatic unit for magic-angle spinning experiments that includes spinning rate stabilisation of 0.0275% or better.
- b) Facility for rotor synchronized experiments.

V. Probes:

- a) Triple Resonance ($^1\text{H}/^{13}\text{C}/^{15}\text{N}$) probe with low electrical field inside the coil to reduce RF-induced heating of the sample for use with biological solids (spinning frequency of 24 kHz).
- b) Triple-resonance $^1\text{H}/\text{X}/\text{Y}$ probe (spinning speed 67 kHz or more) with inserts and filters for broad-band operation), variable temperature range -140°C to 150°C , maximum nutation frequencies of 200 kHz, 150 kHz, and 100 kHz on ^1H , ^{13}C , and ^{15}N channels respectively.
- c) Precise control of the stator angle for STMAS kind of experiments

VI. Essential Accessories

- a) All required accessories for long term VT (-140°C to 200°C operation)

VII. *Optional Items.*

- a) System capable of delivering a homospoil gradient pulse for use in solid state experiments.
- b) 20 rotors with Zirconia rotors, 40 KEL-F caps and 20 Boron Nitride caps suitable for the E-free probe and other rotor accessories such as cap removal, sample filling assembly, etc.
- c) 10 Zirconia rotors, 20 KEL-F caps and 10 Boron Nitride caps and other rotor accessories such as cap removal, sample filling assembly, etc for the 67-70 kHz
- d) Triple-resonance $^1\text{H}/\text{X}/\text{Y}$ probe (spinning speed 35 kHz or more) with inserts and filters for broad-band operation), variable temperature range -140°C to 200°C , maximum nutation frequencies of 200 kHz, 150 kHz, and 100 kHz on ^1H , ^{13}C , and ^{15}N channels respectively.
- e) ^2H lock transmitter and receiver unit

VII. **Requirements and conditions for Items 1, 2 and 3**

- a) Quote for the optional items should be separate and should not be included the basic quote.
- c) Two years standard warranty of the entire spectrometer should be provided.

- d) After completion of standard warranty of 2 (Two) years, an additional comprehensive maintenance contract for five years for all parts and peripherals should be undertaken. The AMC should include the cost of all the items required for smooth functioning of the spectrometer. During the AMC period, the defective, items, parts, peripherals or modules should be replaced by the supplier at their cost.
- e) On-site training for operation and maintenance should be given during the installation.
- f) Intensive operational and maintenance training at the site of the manufacturer for two persons should be provided.
- g) Periodical visit of application specialist for on-site training and implementation of latest NMR experiments, at least once in a year for five years after the initial warranty period.
- h) The Installation of the instrument should be carried out by an engineer(s) from the principal company. Complete cost of installation should be borne by the vendor.
- i) Liquid Helium required for installation and topping off the magnet should be provided by the vendor and should be included in the basic cost of spectrometer.
- j) Price for the each item / accessory / optional Items of the spectrometer should be quoted separately.
- k) In case of magnet-quench during the installation or later due to faulty design, the expenses incurred for recharging or replacing should be borne by the vendor.

- l) Technical details of all basic and optional items should be provided.
- m) If required, vendor should be able to give demonstrations of the capabilities of the spectrometer, at Indian sites.
- n) Hard copy/soft copy of the service and operational manuals for all the modules of the spectrometer, peripherals and accessories must be supplied with the spectrometer.
- o) The minimum power required for the operation of spectrometer with all the accessories must be specified in the quote.
- p) Quote for optional items will not be considered for commercial evaluation (mandatory to quote separately).

Audited Annual Turnover

Annexure - B

S.No.	Financial/ Accounting Year	Profit (Rs.)	Loss (Rs.)	Annual Turnover (in INR)
1.	2016-2017			
2.	2015-2016			
3.	2014-2015			

Authorized Signatory with Seal

Note:

This Annexure - B should be certified by Chartered Accountant (CA) as per the format given above duly signed and stamped by the CA on their letterhead.

Supply Order Details of 600 MHz State of the Art Wide Bore NMR Spectrometers to Carry out High Resolution NMR Experiments in Solid State to Other Firms.

Annexure - C

S.No.	Name of the company with full address	Name of the Project	Purchase Order No. & Date	Brief Item Description with Model No.	Item Value in Currency
Signature					
Name					
Designation					
Name of the Company					
Date					
Seal of the Company					

TATA INSTITUTE OF FUNDAMENTAL RESEARCH

Centre for Interdisciplinary Sciences

Plot No.36/P, Gopanpally Village, Serilingampally Mandal, Ranga Reddy District.
Hyderabad - 500 107, Telangana, India.

(PURCHASE SECTION)

Terms and Conditions

1. **PART "A" (Technical Bid) consisting of Technical Bid with Commercial Terms and PART "B" (Financial Bid) consisting of only Price** shall be submitted in **separate** sealed envelopes duly superscribed with the tender enquiry number, and the due date in bold letters, addressed to the Administrative Officer, Tata Institute of Fundamental Research, Plot No.36/P, Gopanpally Village, Serilingampally Mandal, Ranga Reddy District. Hyderabad-500 107, Telangana, India. The envelopes should be clearly marked on top as either PART "A" or PART "B".

The two sealed covers should be further put in a master cover superscribed with the Tender Enquiry No., Due Date in bold letters, addressed to the Purchase Officer, Tata Institute of Fundamental Research, Plot No. 36/P, Gopanpally Village, Serilingampally Mandal, Ranga Reddy District. Hyderabad-500 107, Telangana, India. The sealed master envelop has to be delivered by hand/courier at the security Gate Office of TIFR Hyderabad on or before 13.00 hrs. on the due date specified. The technical bid will be opened in the presence of attending tenderers at 15.00 hrs. on the due date at Purchase Section, TIFR Hyderabad. Tenders submitted after 13.00 hrs. on due date will not be considered.

2. **In case the PART "A" and Part "B" bids are not sealed in separate envelopes the tender will be rejected.**
3. The technical bid should not contain any indication of the price. The bidder should take special care not to mention anything related to pricing and costing aspect of whatsoever nature. The technical bid should include/contain only technical specifications, technical literature, drawing, quantity, manufacturing and delivery schedule, mode and terms of payment, mode of dispatch, the quantum and percentage of statutory levies payable by the purchaser as extra and all related commercial terms and conditions for the supply and for the services like erection and commissioning to be rendered by the tenderer. The details of the validity of the tender should also be indicated along with the commercial details.
4. After scrutiny of Technical Bids, Financial bids of only those bidders who are shortlisted on technical basis will be opened at on later date. The opening date, time and venue will be intimated to the technically successful bidder.

5. **Tender Document Fee:**

- a) **For Indian Supplier:** Tender fee for **Rs. 700/-** (Non-refundable) in the form of D.D. in favour of "TIFR Centre for Interdisciplinary Sciences", payable at Hyderabad to be enclosed with the Technical Bid (Part - A).
- b) **For Foreign Supplier:** Tender fee of **USD 100** (Non-refundable) in the form of advance cheque in favour of "TIFR Centre for Interdisciplinary Sciences", payable at Hyderabad to be enclosed with the Technical Bid (Part A).

6. **Earnest Money Deposit (EMD):**

- a) **For Indian Supplier:** Earnest Money Deposit (EMD) for **Rs. 20,00,000/-** in the form of D.D. in favour of "TIFR Centre for Interdisciplinary Sciences", payable at Hyderabad to be enclosed along with the technical Bid (Part - A).
- b) **For Foreign Supplier:** Earnest Money (EMD) for **USD 31000** in the form of advance cheque in favour of "TIFR Centre for Interdisciplinary Sciences", payable at Hyderabad to be enclosed with the Technical Bid (Part - A).

EMD shall be interest free and it will be refunded to the unsuccessful bidder without any interest. EMD will be forfeited if the bidder withdraws or amend impairs or derogates from the tender in any respect.

- 7. **Bidders who have not accepted the job/order awarded to them or withdrawn from the tender process OR whose EMD/Security deposit has been forfeited in the past their bids will not be considered and treated as ineligible / disqualified.**
- 8. After downloading the documents please inform your company details such as name, address, telephone nos., contact person and email address etc. by email to us. (purchase@tifrh.res.in) to enable us to inform prospective bidder for any corrigendum/changes if any; in the Tender document before due date.
- 9. Quotations must be valid for a period of 180 days from the due date.
- 10. Tenders containing correction, overwriting will not be considered. Late or delayed/Unsolicited quotations/offers shall not be considered at all. These will be returned to the firms as it is. Post tender revisions/corrections shall also not be considered.
- 11. Tenderer should sign on all the pages of the technical bid and the price bid.
- 12. The price quoted for Import item must be on following basis:
 - a) Ex-Work/factory duly packed airworthy/seaworthy and of international standard
 - b) FOB/FCA

- c) CIF Hyderabad, Airport Port (all-inclusive i.e. Cost of Goods, Packing, Insurance, Inland transportation, freight etc.)

For local item /supply, offer should be on FOR basis (i.e. total landed cost for delivery at TIFR Hyderabad).

The dimension of the item (viz. H, W, L, weight etc.) shall be specifically stated and also mention whether the mode of shipping the item is Airworthiness / Seaworthiness or both. Accordingly the mode of shipment will be decided by TIFR Hyderabad.

Price must be quoted in the Price Bid Format attached herewith as “Part -B” (Financial Bid).

13. If equipment offered is to be imported, arrangements for import will be made by us.
14. Tenders who do not comply with any of the condition are liable to be rejected.
15. The Institute shall be under no obligation to accept the lowest or any other tender received in response to this tender notice and shall be entitled to reject any tender without assigning any reason whatsoever.
16. TIFR reserves the right to place the order for part/reduced quantity than what is specified in the tender.
17. **Performance Security:** The Successful bidders should deposit @ 10% of Purchase Order value as Performance Security against issue of order/contract at the earliest. The performance security shall be in the form of Demand Draft in favour of “TIFR Centre for Interdisciplinary Sciences, Hyderabad” payable at Hyderabad (or) Bank Guarantee from State Bank of India & Associates (or) any one of the Nationalized Banks.

The Performance Security will be returned back to the successful supplier on receipt of the Performance Bank Guarantee (or) The 10% Performance Security Deposit may be extended as Performance Bank Guarantee valid for 60 days beyond the date of completion of all contractual obligations of the supplier including warranty period. Vendor should clearly mention their acceptance to this effect in their quote.

Performance Bank Guarantee: Performance Bank Guarantee for 10% of the value of supply should be provided and it should be valid for 60 days beyond the date of completion of all contractual obligations of the supplier including warranty period. Performance Bank Guarantee should be from Nationalized Bank. In case Performance Bank Guarantee is not provided, 90% payment only would be released and balance after 60 days beyond the date of completion of all contractual obligations of the supplier including warranty period. Vendor should clearly mention their acceptance to this effect in their quote.

18. **PAYMENT TERMS:** 80% payment shall be made through irrevocable L/C on presentation of complete and clear shipping documents, Material receipt and balance 20% of the amount shall be released after the receipt, installation, commissioning and acceptance of the equipment and on submission of "**Performance Bank Guarantee (PBG)**" or "**Standby Letter of Credit**" for an amount equivalent to 10% of the Purchase Order Value. The PBG or "Standby Letter of Credit" shall be valid for a period of **60 days** beyond the date of warranty period. The PBG should be from State Bank of India & Associates (or) any one of the Nationalized Banks.
19. For Import cases: **No Agency commission will be paid as per Govt. of India rules.**
20. All bank charges outside India to supplier's account only.
21. TIFR is exempted from paying of Custom Duty under the notification No.51/96 dated 23.07.1996, Excise Duty under the notification No.10/97 dated 01.03.1997, for all procurements/supply meant exclusively for Educational, scientific and research purpose. Whenever the exemption certificate not honored by the authorities, the applicable duty will have to be paid. Hence Excise & Custom duties, if any, should be shown separately.
22. **TAXES :** TIFR does not have any exemption/concession on payment of Sales Tax and we are not authorized to issue any Sales Tax Form 'C' & 'D'.

Deduction of Indian Income Tax Deduction at Source: The Deduction of Indian Income Tax Deduction at source (TDS) will be deducted as per IT Act. The taxes at the time of actual utilization of service etc. will be deducted if applicable any.

GST rule will be applicable with effect from 01.07.2017. The applicable TDS /other charges if any as per GST rule will be deducted as per new GST regime.

TIFR-Hyderabad GST NO: 36AAATT3951F2ZG.

23. "TIFR Hyderabad is a public funded research institute and exempted from paying custom duty under Notification No: 51/96 dtd 23.07.1996, excise duty under notification No: 10/97 dtd 01.03.1997. GST Notification No: 45/2017 (CGST), 47/2017 (IGST) of applicable GST legislation (from time to time)" Certificate will be provided by TIFR-Hyderabad.

24. Bidders , please provide the PAN No., Bank Details, email ID, Contact person details, GST No etc.
25. **The Supplier shall arrange to ship the ordered materials within the mutually agreed delivery period mentioned in the order unless extended with/without penalty.**
- a) In case of delay in supply on part of the supplier, a penalty @0.5% per week of order value will be charged for delayed period subject to a maximum of 10% order value.
 - b) If the delay in the shipment of the ordered materials attributable to the supplier exceeds agreed time period from the date of original agreed upon date of shipment and extended with/without penalty, the TIFR Hyderabad shall have the right to cancel the contract / purchase order and recover the liquidated damages from other dues of the party or by legal means. It will also affect the other/future business dealings with such suppliers.
 - c) The same rate of penalty shall be applicable for late installation of the equipment/instrument also.
26. **COMMENCEMENT OF WARRANTY PERIOD:** The warranty period of an item shall commence from the date of receipt of the item in good working condition and satisfactory installation/commissioning/demonstration at the project site.
27. **ANNUAL MAINTENANCE CHARGES:** The bidder must mention in the quotation, the rate/amount of annual maintenance charges, if we opt for maintenance contract after expiry of the warranty period.
28. Specifications are basic essence of the product. It must be ensured that the offers must be strictly as per our specifications. At the same time it must be kept in mind that merely copying our specifications in the quotation shall not make the parties eligible for consideration of the quotation. A quotation has to be supported with the printed technical leaflet/literature of the quoted model of the item by the quoting party/manufacturer.
29. **OBSERVANCE OF LOCAL LAWS:** Wherever applicable (particularly for Local vendors), the vendor / contractor shall comply with all law, statutory rules & regulations etc. The vendor/ contractor shall obtain all necessary permits / approval from the local Governing Body, Police, and other concerned Authorities as may be required under law. The vendor /contractor shall pay all types of taxes, fees, license charges, deposits, duties, tolls, royalty or other charges that may be leviable account of any of the operations connected with the execution of this work/ contract.

30. In case of any interpretational issues arise in this tender, the interpretation/decision of TIFR Hyderabad shall be final and binding on the bidder.
31. It is the responsibility of the vendor to make sure that the system being proposed can be exported to India with TIFR Hyderabad as the end user. All clarificatory documentation must be submitted with the Bid.
32. TIFR Hyderabad reserves the right to ask for or to provide any clarification, changes after the release of this tender. Any changes or clarifications provided by TIFR Hyderabad may be checked at TIFR Hyderabad website: <http://www.tifrh.res.in/index.php/commercial-tenders>

**ADMINISTRATIVE OFFICER
(PURCHASE SECTION)
TIFR HYDERABAD**

**Financial Bid for Supply, Installation, Commissioning of 600 MHz
State of the Art Wide Bore NMR Spectrometers to Carry out High
Resolution NMR Experiments in Solid State.
(Part - B)**

Annexure - D

TIFR Hyderabad Enquiry No & Date: _____

Due date: _____

Bidder's Quotation Ref No. & Date: _____

Financial Bid (Bidders must quote their rates using this Format)

S.No.	Item Description as per tender	Make/Brand/ Type	Qty.	Rate per unit (Currency)	Basic Cost of main item (In Currency)
A.					
B.	Ex-Works cost (Duly packed Airworthy/Seaworthy of international standard)				
C.	FOB /FCA Cost (Name of Airport_____)				
D.	CIP/CIF Cost (Upto Hyderabad Airport)(all inclusive i.e. Cost of Goods, Packing, Insurance, Inland transportation, freight etc.)				

Note:

1. All the column should be appropriately filled and not left blank.
2. Do not include any other charges, taxes, duties etc. in the Basic Cost of the item.
3. Any accessories, optional items should be shown separately using above format.
4. Use separate sheet for detail description, specification of the item, but prices should be quoted in same format.
5. Prices quoted in Indian Currency should be on F.O.R. basis and mentioned separately using different table format showing all the applicable taxes/Duties like GST , Freight & Transportation charges and installation charges etc.
6. TIFR Hyderabad being educational & research institute, discounted price shall be offered.

Signature of the Bidder

Name, Address contact no _____

& email id of the bidder/ _____

Company with company's Stamp or Seal _____

Date: _____

Place: _____