भारतीय प्रौद्योगिकी संस्थान इन्दौर
सिमरोल, खण्डवा रोड़, इन्दौर - 453 552

Indian Institute of Technology Indore
Simrol, Khandwa Road, INDORE - 453 552

Ph. : 07324-306958/949
Mail : mms@iiti.ac.in

IIT Indore

NIT No.: IITI(MM)/ CH/1A/1A/573/AR/2018-2019 **February 20, 2019**

Pre-bid Report

The meeting for Pre-bid discussion and presentation was held at IIT-Indore on **12/02/2019 at 03.00 PM for procurement of "High Performance Digital 400MHZ NMR Spectrometer".**

Sl. No	Query raised by	Reference of the Tender Doc.	Query/Clarification/Deviation sought	Clarification/ Response from IITI	Remarks
1.	M/s. Bruker India Scientific Pvt. Ltd.	**Clause 2 (b), Part-II of Chapter-6.**	Clause 2(b) - Best receiver capability with digital receiver for acquisition of multinuclei. Excellent detection capability and elimination of artefacts such as quadrature images with control unit having state of the art technology for signal acquisition, filtering, sampling, multi nuclei acquisition etc	Accepted	Revised
2.	M/s. Bruker India Scientific Pvt. Ltd.	**Clause 2 (k), Part-II of Chapter-6.**	Clause 2(k) - High-power linear broadband amplifiers of >100 W for X-channel and >50 W for 1H (and/or 19F channel) for double resonance liquid state NMR. Please specify all relevant parameters including power (Wattage), frequency range, duty cycle, maximum pulse duration etc.	Accepted	Revised

3.	M/s. Bruker India Scientific Pvt. Ltd.	**Clause 3, Part-II of Chapter-6.**	Clause 3. 5 mm double-resonance broadband high-resolution probe with an actively shielded single axis Z-gradient for observation/irradiation of all NMR nuclei in the range 31P to 109Ag in addition to 1H (please quote for maximum broadband range available); including 1H(19F) and vice versa including 1H-19F correlation 2D expts. sensitive to low gamma nuclei detection; a deuterium lock channel. Variable temperature range from –100 °C to +150 °C or better; automated tuning and matching. Sensitivity of the following nuclei should be as; (i) ^{1}H sensitivity 300 and above, (ii) ^{13}C sensitivity 210 and above, (iii) ^{31}P sensitivity 150 and above, (iv) ^{15}N sensitivity 20 and above, (v) ^{19}F with ^{1}H decoupled sensitivity 300 and above. - Please specify standard sample details for above specs - Clause 5 - An ISO-9001 certified oil free and noise free air compressor (3HP) with 90ltr buffer tank or above and air dryer with all connectors (make and model to be mentioned separately).	5 mm double resonance broadband high-resolution probe with an actively shielded single axis Z-gradient for observation/ irradiation of all NMR nuclei in the range 31P to 15N or better in addition to IH (please quote for maximum range available); inducing IH (19F) and vice versa including 1H-19F correlation 2D expts. sensitive to low gamma nuclei detection; a deuterium lock channel. Variable temperature ranges from —100 C to +150 C or better; automated tuning and matching. Sensitivity of the following nuclei should be as:- (i) 1H sensitivity 300 and above, (ii) 13C sensitivity 200 and above, (jii) 31P sensitivity 100 and above, (iv) 15N sensitivity 20 and above, (v) 19F with 1H decoupled sensitivity 250 and above. Please specify standard sample details for above specs	Revised
4.	M/s. Bruker India Scientific Pvt. Ltd.	**Clause 8(a), Part-II of Chapter-6.**	5 mm DUL channel NMR probehead for 1H & 13C nucleus detection, with z gradient to be supplied with appropriate filters. (a) ^{1}H sensitivity 240 and above, (b) ^{13}C sensitivity 160 and above,	Vendor should quote dual/broadband 2-channel probe	

5.	M/s. Bruker India Scientific Pvt. Ltd.	Warranty Clause: **Refer clause 5(a), Part-I and clause 8(f), Part-II of Chapter-6.**	It is a request to amend the standard warranty as 1 year and include optional 4 year extended warranty	Vendor should quote standard one-year warranty as main item and then 4 year additional warranty as optional.	Revised
6.	JEOL India Pvt. Ltd.	**Clause 1(d), Part-II of Chapter-6.** Magnet: Liquid helium hold time 300 days or more	JEOL's Request: We request you to kindly amend Liquid helium hold time to 365 Days. Nowadays 365 days' helium hold magnet spec is the standard specification for 400MHz NMR and moreover you have to refill Liquid Helium once in a year and both the vendors have 365 days Helium hold magnet. So, we request you to kindly amend the Liquid helium hold time spec to 365 days or more.	>300 day magnet as part of main item and then quote 365 day magnet price as optional.	Revised
7.	JEOL India Pvt. Ltd.	**Clause 1(i), Part-II of Chapter-6.** Magnet: Built in cryo (minimum 5 number) and room temperature (minimum 30 number) shim.	JEOL's Request: We request you to kindly amend room temperature shims to 21. This is the maximum RT shims available for 400MHz NMR spectrometer in the market.	RT shims to be >18 shims	Revised
8.	JEOL India Pvt. Ltd.	**Clause 2(b), Part-II of Chapter-6.** RF Console: Dual/Multi receiver capability with digital receiver for simultaneous acquisition of multi nuclei. Excellent detection capability and elimination of artefacts such as quadrature images with control unit having state of the art technology for signal acquisition, filtering, sampling, multi nuclei acquisition etc.	JEOL's Request: We request you to kindly remove "Dual / Multi receiver capability". As the design of the NMR system varies with vendor manufacturing. JEOL deigns is unique in nature and made with optimum single receiver for dual channel.	Please refer Sl. No. 01	Revised

9.	JEOL India Pvt. Ltd.	**Clause 2(g), Part-II of Chapter-6.** RF Console: Receiver control unit for signal acquisition with real-time digital filtering along with oversampling technology -with dual receiver	JEOL's Request: We request you to kindly remove "Dual / Multi receiver capability". As the design of the NMR system varies with vendor manufacturing. JEOL deigns is unique in nature and made with optimum single receiver for dual channel.	**Accepted Vendor should quote Dual/Multi receiver Capability.**	Revised
10	JEOL India Pvt. Ltd.	**Clause 3 (a), Part-II of Chapter-6.** Probes: 5 mm double resonance broadband high resolution probe with an actively shielded single axis Z-gradient for observation/ irradiation of all NMR nuclei in the range 31P to 109Ag in addition to IH (please quote for maximum range available); inducing IH(19F) and vice versa including IH-19F correlation 2D expts. sensitive to low gamma nuclei detection; a deuterium lock channel. Variable temperature range from —100 C to +150 C or better; automated tuning and matching. Sensitivity of the following nuclei should be as (i) 1H sensitivity 550 and above, (ii) 13C sensitivity 230 and above, (jii) 31P sensitivity 200 and above, (iv) 15N sensitivity 25 and above, (v) 19F with 1H decoupled sensitivity 500 and above. Please specify standard sample details for above specs	5 mm double resonance broadband high-resolution probe with an actively shielded single axis Z-gradient for observation/ irradiation of all NMR nuclei in the range 31P to 15N in addition to IH (please quote for maximum range available); inducing IH (19F) and vice versa including IH-19F correlation 2D expts. sensitive to low gamma nuclei detection; a deuterium lock channel. Variable temperature ranges from —100 C to +150 C or better; automated tuning and matching. Sensitivity of the following nuclei should be as (i) 1H sensitivity 500 and above, (ii) 13C sensitivity 200 and above, (jii) 31P sensitivity 100 and above, (iv) 15N sensitivity 25 and above, (v)19F with 1H decoupled sensitivity 250 and above. Please specify standard sample details for above specs	5 mm double resonance broadband high-resolution probe with an actively shielded single axis Z-gradient for observation/ irradiation of all NMR nuclei in the range 31P to 15N or better in addition to IH (please quote for maximum range available); inducing IH (19F) and vice versa including 1H-19F correlation 2D expts. sensitive to low gamma nuclei detection; a deuterium lock channel. Variable temperature ranges from —100 C to +150 C or better; automated tuning and matching. Sensitivity of the following nuclei should be as (i) 1H sensitivity 300 and above, (ii) 13C sensitivity 200 and above, (jii) 31P sensitivity 100 and above, (iv) 15N sensitivity 20 and above, (v) 19F with 1H decoupled sensitivity 250 and above. Please specify standard sample details for above specs	Revised

11.	JEOL India Pvt. Ltd.	**Clause 8(a), Part-II of Chapter-6.** Optional Items: 5 mm DUAL channel NMR probe head for 1H & 13C nucleus detection, with z gradient to be supplied with appropriate filters.	JEOL Request: 5 mm DUAL channel NMR probe head / or broadband probe for 1H & 13C nucleus detection, with z gradient to be supplied with appropriate filters	Please refer Sl. No. 4	Revised
12.	JEOL India Pvt. Ltd.	Warranty Clause: **Refer clause 5(a), Part-I and clause 8(f), Part-II of Chapter-6.**	JEOL's Request: Since you have asked for three years standard warranty. So, requesting you to remove the additional four years warranty.	Please refer Sl. No. 5	Revised
13.	JEOL India Pvt. Ltd	Conditions for techno commercial bids: Under Commercial: **Point No 4**: Delivery desired is within 6 months from the date of releasing the supply order	JEOL Request: Kindly amend the term as below Delivery desired is within 6 months from the date of opening of LC.	Accepted	Accepted

UPDATED SPECIFICATIONS:

14	**Accessories**	**Clause 5 (a), Part-II of Chapter-6.**	Deviation/ Addition by IIT	(a) An ISO-9001 certified oil free and noise free air compressor (3HP) or above and air dryer with all connectors (make and model to be mentioned separately).	Accepted

OPTIONAL ITEMS:

8.	**Optional items**	**Clause 8 (a), Part-II of Chapter-6.**	Deviation/ Addition by IIT	(a) 5 mm double-resonance / broadband high-resolution probe with an actively shielded single axis Z-gradient for observation/irradiation of all NMR nuclei in the range 31P to 15N in addition to 1H (please quote for maximum broadband range available); including 1H(19F) and vice versa including 1H-19F correlation 2D expts. sensitive to low gamma nuclei detection; a deuterium lock channel. Variable temperature range from –100 °C to +150 °C or better; automated tuning and matching.	Revised
		Clause 8 (b), Part-II of Chapter-6.	Deviation/ Addition by IIT	(b) Different types of Autosampler of various	Revised

				capacities with suitable number of spinners. May be suggested along with their respective prices	& Addition

Bid Submission Schedule:

Last date of bid submission: 06th March, 2019 upto 03.00pm(IST)

Opening of Technical bids: 07th March , 2019 upto 03.00pm(IST)

Financial Bid Corrigendum

Ongoing with the above amendments the **Financial Bid** needs to be restructured. The BOQ uploaded on CPPP may be used to fill the financial details of tender. The following may be read in BOQ mention against each Sl.No.: -

Sl.No. of BOQ	FOR (Earlier details in BOQ)	READ (New details in BOQ)
1.	High Performance Digital 400 MHz NMR (Including **3 Yrs Onsite** Comprehensive warranty)	High Performance Digital 400 MHz NMR (Including **1 Year Onsite** Comprehensive warranty)
1.02	**Accessories**- An ISO-9001 certified oil free and noise free air compressor (3HP) with 90ltr buffer tank or above and air dryer with all connectors (make and model to be mentioned separately). **(Sl. No. 5 of Technical Bid, specification Part- II)**	An ISO-9001 certified oil free and noise free air compressor (3HP) or above and air dryer with all connectors (make and model to be mentioned separately).
2.01	**Optional Items:** (a) 5 mm DUL channel NMR probe head for 1H & 13C nucleus detection, with z gradient to be supplied with appropriate filters.	(a) 5 mm double-resonance / broadband high-resolution probe with an actively shielded single axis Z-gradient for observation/irradiation of all NMR nuclei in the range 31P to 15N in addition to 1H (please quote for maximum broadband range available); including 1H(19F) and vice versa including 1H-19F correlation 2D expts. Sensitive to low gamma nuclei detection; a deuterium lock channel. Variable temperature range from –100 °C to +150 °C or better; automated tuning and matching.
2.02	(b) Auto sampler with a capacity of 60 or more NMR samples, along with suitable number of spinners.	(b) Different types of Auto sampler of various capacities with suitable number of spinners. May be suggested along with their respective prices.
2.05	(e) Additional warranty for four years **(4th to 7th year)**	e) Additional warranty for four years **(2nd to 5th year)**
2.08	(h) Variable temperature set up from -100 °C to +150 °C or better with a resolution, accuracy and stability better than 0.1 °C.	(h) Variable temperature set up from -100 °C to +150 °C or better with a resolution, accuracy and stability better than 0.1 °C.

Note:- Any additional details of Price Bid should be addressed on 'Sheet No. 2 of BOQ'.

* The requirement of the equipment is imminent for research and academic purpose. Hence, delivery schedule will also be taken into consideration during evaluation of bids.

All prospective/willing bidders are requested to take note of this report as part of the Tender document. All other parts of the tender including the terms and conditions of the will remain Unchanged.

In-charge (MMS)