



INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH TIRUPATI

CLARIFICATION ON TENDER NUMBER: IISERT/PUR/0051/20

ITEM DESCRIPTION- SUPPLY, INSTALLATION AND COMMISSIONING OF GC-MS

Refer our Tender No: IISERT/PUR/0051/20 dated 12-May-2020 for Supply, Installation and Commissioning of GC-MS

Pre-Bid meeting was held on May 18th, 2020 at 15:30 Via Google Meet and minutes of meeting is as under.

At the outset, the Chairman welcomed all the Members and the representative of the Prospective Bidders and briefed in general the scope of the Project and thereafter requested Assistant Registrar (S&P) to brief the vendors on the salient features of the commercial terms and the indenting Officer to read out the clarification sought by the Prospective Bidders and replied thereto as detailed in **Annexure -II**

The representatives present were satisfied with the replies given and it was informed that the corrections / additions / clarifications given, as discussed during the Pre-Bid Conference would be hosted on the website of IISER Tirupati and all the Prospective Bidders are required to take cognizance of the proceedings of the Pre-Bid Conference before submitting their bids as stipulated in the Bidding Documents.

The other terms & conditions of the notice issued on our IISER website <http://www.iisertirupati.ac.in/> will remain unchanged. No more correspondence in this regard will be entertained

The meeting ended with vote of thanks to the Chair

23.05.2020

Sd/-
Assistant Registrar (S&P)



IISER TIRUPATI
PRE-BID CONFERENCE FOR INSTALLATION AND COMMISSIONING OF GC-MS
TECHNICAL QUERIES AND CLARIFICATION

TENDER NUMBER - IISERT/PUR/0051/20

DATE: 23/05/2020

S.No	Query/Clarification Sought	Clarification / Amendment
	The Technical specifications are modified according to following:	New Corrected Text:
1.	MS: specifications: A quadruple mass spectrometer with ' non-coated inner source ' confirming to international safety standards	A quadruple mass spectrometer with ' non-coated ion source ' confirming to international safety standards
2.	Resolution: ' Better than 0.5 amu ' @ 10% peak height. Adjustable to constant peak width throughout the mass range.	Resolution: ' Better than 1.0 amu ' @ 10% peak height. Adjustable to constant peak width throughout the mass range.
3.	Filament warranty: minimum for 3 years	Filament warranty: minimum for 3 years (Comprehensive warranty; need based replacement within the mentioned time period)
4.	Ion source temp upto 350°C for better sensitivity for active compounds and it should be programmable. Transfer temp 100-350°C; Quadrupole temp 100-200°C. Quadrupole should be heated to keep quadrupole clean for a longer period.	Should be kept as it is.
5.	2. vii) Possible to adjust pressure in increments of 0.001 psi, pressure setting range of 0-95 psi	Corrected text should be: 2 vii) Possible to adjust pressure in increments of 0.001 psi, pressure setting range of 0-95 psi or higher.

6.	EI source should be inert to active compounds and should be programmable.	Should be kept as it is.
7.	The EI source should have a dual filament design with automatic software selection of the other filament if one fail during analysis	Should be kept as it is.
8.	EI/CI MSD S/N Ratio: 1,500:1 with 1 pg/ μ L OFN, 1,500:1 (EI,Ext) , 1,200:1 (PCI), 2,000:1 (NCI)	<p>EI Source - S/N of 1500:1 by injecting 1ul of 1pg/ul OFN standard</p> <p>PCI source - S/N of 1200:1 by injecting 1 ul of 100pg/ul benzophenone (BZP) standard</p> <p>NCI source – S/N of 2000: 1 by injecting 2 ul of 100 fg/ul OFN</p>
9.	vii) Ionization current range 15-220 eV	Can be replaced as: “Ionization current range 150 eV or higher”
10.	xi) Sensitivity: 5 x 10 ⁻⁴ Torr. into Faraday cup. Should be measured with N2 @ 28 amu with 1 amu full peak width, 10% height, 70 eV electron energy, 6 eV ion energy and 2 mA electron emission.	Can be replaced as: Should be measured with N2 @ 28 amu with 1 amu full peak width, 10% height, 70 eV electron energy, 6 eV ion energy and 2 mA electron emission.
11.	xii) Minimum Partial pressure: 5 x 10 ⁻¹² Torr Faraday cup, 5 x 10 ⁻¹⁴ Torr Electron multiplier Measured with N2 @ 28 amu with 1 amu full peak width, 10% height, 70eV electron energy, 6 eV ion energy, and 2 mA electron emission.	Can be replaced as: 5 x 10 ⁻⁷ Torr or higher. Electron multiplier Measured with N2 @ 28 amu with 1 amu full peak width, 10% height, 70eV electron energy, 6 eV ion energy, and 2 mA electron emission.

<p>12. Gas Chromatograph (GC)</p> <p>ix) Operating temp range from near ambient to 450°C</p> <p>x) Vendors must supply imported GC syringes of 1, 5, 10, 25, 100ul 2 nos. each with GC.</p> <p>Flame Ionization Detector (FID)</p> <p>i) Data acquisition rate of upto 500 Hz</p> <p>vii) Should quote Semiquant software, e-method can be downloaded from vender site. Should have Auto SIM Facility to save time to setup SIM manual Method.</p> <p>Headspace Sampler</p> <p>Headspace Sampling Method must be standard full electronically control through PC. It must contain min. 10 vials sampler. For safety measures, it must have leak inspection capacity.</p> <p>Essential Accessories require to operate GC-MS</p>		<p>xii)Can be replaced as: Operating temp range from near ambient to minimum 400°C or above</p> <p>Can be deleted here and mentioned in “Essential Accessories”</p> <p>Should be kept as it is.</p> <p>Should be shifted to the MS specifications as point no (ix)</p> <p>Modified text should be:</p> <p>Headspace Sampling Method must be standard full electronically control through PC. It must contain min. 8-10 vials sampler. For safety measures, it must have leak inspection capacity.</p>
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17.	<p>i) 2 standard PCs:</p> <p>Minimum PC requirements: PC running Windows 2000, XP, 7, 8, or 10 with 1024 x 768 VGA graphics, keyboard, mouse, CD ROM Drive, and 1 Unused USB or RS- 232C Port.</p> <p>ii) 2 laptops</p> <p>iii) 5 Columns HP-5 MS or equivalent</p>	<p>Should be kept as it is with additional point mentioned: PC-1 with GC-MS software PC-2 without GC-MS software</p>
18.		<p>Can be removed.</p>
19.		<p>The modified text should be:</p>
20.	<p>V) Regular maintenance consumables for three years including standard GC Vials (2000), Septa (2000), Syringes, Filters (100) etc.</p>	<p>5 Columns HP-5 MS or equivalent (Hight: 30 m, Dia: 0.25 micron)</p>
21.	<p>vi) Should quote separation Probe to provide fast analysis of solid, liquid, and slurry samples. The process is advanced simple, clean, and requires limited sample preparation. It should be use to protect GC liner and column contaminates. It should be use when working</p>	<p>The modified text should be:</p> <p>V) Regular maintenance consumables for three years including standard GC Vials (2000), Septa (2000, PTFE), Syringes, 100 Filters (PTFE, 0.22 micron, 13 mm), 100 Filters (PTFE, 0.22 micron, 25 mm) etc.</p> <p>Should be kept as it is.</p>

on complex samples like food and environmental applications.

xi) Vendors must supply imported GC syringes of 1, 5, 10, 25, 100ul 2 nos. each with GC.

22.

This point should be replaced from GC Specs and added under the section: "Essential Accessories require to operate GC-MS"

The modified text should be:

Autosampler syringes: 5 numbers (10 ul)

ix) Vendors must supply imported manual GC syringes of:

1 ul: 5 numbers,

5 ul: 5 numbers

10 ul: 5 numbers

25 ul: 5 numbers

100 ul: 5 numbers

Mass Spec calibration training: Minimum for 10 days, free of cost

23.

The corrected text:

Mass Spec calibration training: Minimum for 10 days **"(2 weeks over 3 months of period)"**, free of cost.



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ANNEXURE -III

IISER TIRUPATI

**PRE-BID CONFERENCE FOR INSTALLATION AND COMMISSIONING OF GC-MS
COMMERCIAL QUERIES AND CLARIFICATION**

TENDER NUMBER - IISERT/PUR/0051/20

DATE: 18/05/2020

S.No	Query/Clarification Sought	Clarification / Amendment
	-----NIL-----	-----NIL-----