



## INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH

### PUNE

CLARIFICATION ON TENDER NUMBER - IISER-PUR-1586B-16

ITEM DESCRIPTION- TO SET UP COLLABORATIVE MASS SPECTROMETRY BASED EQUIPMENT FOR A COLLABORATIVE CENTER TO PROMOTE ADVANCED MASS SPECTROMETRY BASED METABOLOMICS AT IISER PUNE

Refer our Press Tender Notice No. IISER/S&P/6/17 dated 27/4/2017 to set up a Collaborative Mass Spectrometry Center at IISER Pune . Tender Reference Number - IISER-PUR-1586B-16.

Pre-Bid meeting was held on May 09<sup>th</sup>, 2017 at 3.30 PM 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 Pune 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 [www.iiserpune.ac .in](http://www.iiserpune.ac.in) will remain unchanged. No more correspondence in this regard will be entertained

The meeting ended with vote of thanks to the Chair

9.5.2017

Sd/-  
Assistant Registrar (S&P)



## IISER PUNE

**PRE-BID TO SET UP COLLABORATIVE MASS SPECTROMETRY BASED EQUIPMENT FOR A  
COLLABORATIVE CENTER TO PROMOTE ADVANCED MASS SPECTROMETRY BASED  
METABOLOMICS AT IISER PUNE**

**TECHNICAL QUERIES AND CLARIFICATION**

TENDER NUMBER - IISER-PUR-1586B-16

DATE : 9.5.17

S.No	Query/Clarification Sought	Clarification / Amendment
1	Since the requisition involves GC-MS, please include GC-MS in the title.	The title should be read as “Collaborative Mass Spectrometry Center for GC-MS and LC-MS Platforms for Metabolomics”
<b>Instrument 1: Gas Chromatography-Mass Spectrometry (GC-MS/MS) platform for targeted and non-targeted metabolomics</b>		
2	Tender mentions Pressure set points in the range 0.000 to 99.99 psi. It should be 0.00 to 99.99 psi.	Please read “0.000 to 99.99psi” as “0.00 to 99.99psi”.

3	Tender mentions split or splitless injection for all capillary columns from 50um to 530um. Capillary column dimension universally expressed in mm i.e. 0.1mm, 0.25mm,0.32mm & 0.53 mm. um normally is the expression of capillary column inner lining of packing material thickness. Kindly change it accordingly.	“50µm to 530µm” may also be read as “0.05mm to 0.53mm”.
4	Tender mentions provision to install two or more columns in the oven: At least two >100m capillary columns or two 20ft steel-packed columns. In GCMS-MS requirement of putting 20ft packed column is not justifiable as per resolution is concerned. Kindly clarify this point.	Tender Specification prevails. No change in the specification.
5	Tender mentions the GC should have a Retention Time Repeatability of <0.0008 min or better. It should mention by using which solvents/ chemicals to achieve this value. Because this value will vary as per the solvents/ chemicals used. Hence no use of numerical value without the name of the different chemicals. Kindly mention which chemicals and why they should be used.	Since different GC manufacturers use different chemical standards to assess the retention time repeatability, this point should be read as “The GC should have a Retention Time Repeatability of 0.0017min or better”.
6	Tender mentions one each of 50m long FID-grade and MS-grade inert DB5/ HP5 or equivalent columns should be provided. Instead of mentioning FID & MS, kindly mention 0.25um thickness of 30 meter column (DB- 5) which can be used for both the cases.	This point should be read as “One each of 30m long FID-grade and MS-grade inert DB5/ HP5 or equivalent columns should be provided”.

7	Tender mentions system should have an inert EI source with dual filaments and it should be programmable up to 350°C. Kindly mention it as 300°C or more.	Please read “350°C” as “≥300°C”.
8	Tender mentions the triple quadrupole should be inert and it should be heatable (≥180°C). Quadrupole heating is not universal. Kindly use the term equivalent better technique.	Please read this point as “The triple quadrupole should be inert; it should be heatable (≥180oC) or should be equipped an equivalent or better cleaning technique”
9	Tender mentions system should have an adjustable electron energy from up to 300 eV. NIST requires 60 eV for it's huge stock of Library. Kindly change it for standard 70eV.	“300eV” should be read as “150 eV”.
10	Tender mentions Mass axis stability should be 0.10 amu/24 hrs. More hours of stability for longer period give better analysis with ruggedness of method. Kindly change it to 48 hours.	Please read “0.10 amu/24 hrs” as “0.10 amu/≥24 hrs”.
11	Tender mentions 100 fg/μL octafluoronaphthalene (OFN) should produce the signal-to-noise for the transition from m/z272 to m/z 222 S/N: 6000:1 or better; this sensitivity should be demonstrated at the time of installation. S/N of 6000 is on lower side. Kindly change it to 8000 or more and to be confirmed during installation with 30 meter column.	“100 fg/μL octafluoronaphthalene (OFN) should produce the signal-to-noise for the transition from m/z 272 to m/z 222 S/N: 10000:1 or better; this sensitivity should be demonstrated at the time of installation using a 30m column”.
12	Tender mentions system should have software controlled Auto or manual tune. Kindly remove manual tune. It's pretty slow to generate data.	Tender Specification prevails. No change in the specification.
13	Tender mentions Wiley and Feihn library to be quoted. While buying Licensed NIST, it covers almost everything. So remove Wiley as well as Fiehn. Kindly put it as equivalent	“Licensed and latest version of the Wiley mass spectral library including NIST should be supplied with the instrument. Mass spectral and retention time library of derivatized

	metabolite library.	compounds (Fiehn or equivalent) should also be provided. Details of compound types, number of compounds, number of spectra, retention times in the quoted library should be given in the quote.
14	Tender mentions FID sensitivity of minimum detectable level should be <1.4 pg C/S. Detection limit without mentioning which chemicals is being unscientific. Kindly mention Dodecane / Tridecane analysis. Please change 1.4pg C/S to 1.5pg C/S.	Please read this point as “Minimum detectable level of dodecane or tridecane should be <1.5 pg C/S”
15	Tender mentions data Acquisition Rate: up to 500 Hz. Kindly change it as 250 - 300 Hz or 4ms (milliseconds instead of 10 ms).	Please read this point as “Data Acquisition Rate: $\geq 300$ Hz or $\geq 4$ ms”.
16	Tender mentions GCMS software solution should capable to obtain data of MS and GC detectors simultaneously or separately. For FID & MS to run together there is a need the add up of detector splitter. Kindly add that if simultaneous data is needed.	Please read this point as “As a provision for future installation of a splitter, GCMS software solution should capable to obtain data of MS and GC detectors simultaneously or separately.”.
17	Automated Headspace analyzer and purge and trap systems should be separately quoted. Kindly mention it as built-in trap rather than P & G which is pre-dominantly being used for environmental sample only.	Please read this point as “Automated Headspace analyzer and purge and trap/ built in trap systems should be separately quoted”.
18	Bids for the GC instrument with Quadrupole as the 1st mass analyzer, followed by a high Resolution Time of Flight or Trap analyzer can be submitted separately. IISER Pune reserves a right to decide the detector combination based	Tender Specification prevails. No change in the specification.

	on the comparisons with the triple quadrupole detector. For lowest detection and quantification MS-MS (triple quad) is best rather than TOF & ION TRAP. So kindly remove this option of TOF & ION TRAP.	
<b>Instrument 2: Liquid Chromatography-Mass Spectrometry (LC-MS/MS) platform for targeted and non-targeted metabolomics</b>		
19	Please reduce autosampler capacity to 200× 2ml vials	“Sample capacity: >200× 2ml vials and 96 and 384 well MT plates.”.
20	Tender mentions “Mass analyzers: The instrument must have a Quadrupole as the 1st mass analyzer, followed by a high resolution Time of Flight or Trap analyzer with mass range $\geq 5000$ m/z.”. Please change it to “Mass analyzers: The instrument must have a Quadrupole as the 1st mass analyzer connected to a high resolution Time of Flight or Trap analyzer with mass range $\geq 3000$ m/z”.	Please read this point as “Mass analyzers: The instrument must have a Quadrupole as the 1st mass analyzer connected to a high resolution Time of Flight or Trap analyzer with mass range $\geq 3000$ m/z”.
21	Please mention the “acquisition rate” in Hz too.	Please read this point as “Acquisition rate: $\geq 30$ Spectra per second or $\geq 12$ Hz in MS and MS/MS mode”.
22	Please mention whether the library should contain MS spectral data of metabolites of natural compounds, pesticides, drugs etc.	Please read this point as “Accurate mass and MS spectral database and MS/MS libraries (natural compounds, pesticides, drugs and their metabolites) should be provided with the LC-MS/MS system.”
<b>Instrument 3: High Performance Liquid Chromatography (HPLC) platform for preparatory and quantitative metabolomics</b>		
23	Please mention Charged Aerosol Detector (CAD) as an alternative to the Evaporative Light Scattering Detector (ELSD), since some vendors can provide only CAD.	“HPLC 1 should have an Evaporative Light Scattering Detector (ELSD) with the previously given specifications or a Charged Aerosol Detector (CAD) with the following specifications” Type: Charged Aerosol Detector H with concentric flow

		<p>nebulizer</p> <p>Data Collection Rate: Digital, adjustable, 200 Hz max</p> <p>Gas Requirements: Nitrogen or Compressed Air (Nitrogen recommended) Inlet Pressure: 482-551 kPa (4.8-5.5 bar, 70-80 psi)</p> <p>Temperature Control: Evaporation temperature Settable Range from Ambient + 5°C to + 100°C</p> <p>Inlet Gas Pressure: Electronically controlled pressure regulation system</p> <p>Filter: Filter Time Constant 4th order low-pass Bessel digital with time constraint based user selections- 0.1, 0.2, 0.5, 1.0, 2.0, 3.6, 5.0, 10.0</p> <p>Range: Dynamic Range: Up to 4 orders of magnitude</p>
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IISER PUNE

**PRE-BID CONFERENCE TO SET UP COLLABORATIVE MASS SPECTROMETRY BASED EQUIPMENT  
FOR A COLLABORATIVE CENTER TO PROMOTE ADVANCED MASS SPECTROMETRY BASED  
METABOLOMICS AT IISER PUNE**

COMMERCIAL QUERIES AND CLARIFICATION

TENDER NUMBER - IISER-PUR-1586B-16

DATE : 9.5.17

S.No	Query/Clarification Sought	Clarification / Amendment
1.	Query regarding the bank charges  Please clarify whether inside bank charges are to be borne by supplier or IISER	Please refer Chapter 3 Point No 2 - Bank Charges  <b>All Bank charges inside India, including opening of LC, to IISER, PUNE Account and outside India to Beneficiary's Account only. In case the BIDDER seeks confirmation of LC such confirmation charges are to the Beneficiary's account. This may please be noted and confirmed</b>



2.	<p>Chapter 3 , Page No - 18, Point no. 13.5 - Warranty / Support</p> <p>mentions that “The equipment must be supported by a Service Centre in India manned by the principal vendor’s technical support engineers. The support through this Centre must be available 24 hours in a day, seven days a week and 365 days a year”. None of the service centers are open for 24 hours. Please change it to 12 hours.</p>	<p>Chapter 3 , Page No - 18, - Warranty / Support, Point no 13.5 is amended as</p> <p><b>The equipment must be supported by a Service Centre in India manned by the principal vendor’s technical support engineers. The support through this Centre must be available 12 hours in a day, seven days a week and 365 days a year”.</b></p>
3.	<p>How to upload the commercial bid including the optional instrument in the eprocure portal (<a href="https://eprocure.gov.in">https://eprocure.gov.in</a>)?</p>	<p><b>CHAPTER-5 PRICE SCHEDULE may be filled separately for each equipment and combine into one pdf file and upload it on the CPPP as single file.</b></p>