



INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH TIRUPATI

CLARIFICATION ON TENDER NUMBER: IISERT/PUR/0694/20

ITEM DESCRIPTION - SUPPLY, INSTALLATION AND COMMISSIONING OF HIGH-RESOLUTION QUADRUPOLE TIME OF FLIGHT OR EQUIVALENT MASS SPECTROMETER WITH UHPLC.

REFER OUR TENDER NO: IISERT/PUR/ 0013/21 DATED: 21/05/2021 FOR SUPPLY, INSTALLATION AND COMMISSIONING OF HIGH-RESOLUTION QUADRUPOLE TIME OF FLIGHT OR EQUIVALENT MASS SPECTROMETER WITH UHPLC.

Pre-Bid meeting was held on May 31st, 2021 at 16:30 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 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

03.06.2021

Sd/-
Assistant Registrar (S&P)



Annexure II
IISER TIRUPATI
PRE-BID CONFERENCE FOR INSTALLATION AND COMMISSIONING OF HPC

TECHNICAL QUERIES AND CLARIFICATION

TENDER NUMBER - IISERT/PUR/0013/20

DATE: 31/05/2021

Sr. No	Query/Clarification Sought	Clarification / Amendment
1	Section 1.1a. A combined electrospray ionization (ESI) & atmospheric pressure chemical ionization (APCI) source must be included. Vendors not having combined sources can offer dedicated ionization sources. Request to amend: Dedicated ion sources	A combined electrospray ionization (ESI) & atmospheric pressure chemical ionization (APCI) source must be included. Vendors can also quote dedicated ionization sources.
2	Section 1.2b. The ion source should also have direct analysis probe. Request to amend: Remove this point	No Change
3	Section 1.1c. Positive and negative ionization capabilities must be included as standard on the instrument. Request to amend: Positive and negative mode ionization must happen in single run	No Change
4	Section 1.1f. ESI Flow Rate Range: upto 2ml/min (without the use of splitter) Request to amend: Change the flow rate up to 1 ml/min (without the use of splitter)	No Change

5	<p>Section 1.2a. Quadrupole Mass Range: The instrument must have a high mass filter for efficient transmission of ions having mass range at least ≤ 30 to $\geq 30,000$ m/z or better and upto 4000 m/z or better in resolving mode for QTOF.</p> <p>Request to amend: Quadrupole mass range: 20-1250 m/z. In transmission mode: ≤ 50 to $\geq 10,000$ m/z</p>	<p>No Change in Quadrupole mass range.</p> <p>In transmission mode: ≤ 50 to $\geq 30,000$ m/z</p>
6	<p>Section 1.2b. TOF Mass Range: 30,000 m/z or better.</p> <p>Request to amend TOF Mass Range: 10,000 m/z or better</p>	<p>No Change</p>
7	<p>Section 1.3a. Resolution (full width at half maximum, FWHM) must be better than 40,000 (FWHM) for m/z=1000 for QTOF technology (or) for equivalent HRMS mass analyzer the resolution must be more than 2,40,000 at around 200 m/z.</p> <p>Request to amend: >40,000 FWHM at a range of mass from 900 to 3000 m/z & Resolution (full width at half maximum, FWHM) must be better than 50,000 (FWHM) for m/z = 1000 for QTOF technology (or) for equivalent HRMS mass analyzer the resolution must be more than 1,20,000 at around 200 m/z.</p>	<p>Resolution (full width at half maximum, FWHM) must be better than 40,000 (FWHM) for m/z = 900 to 3000 for QTOF technology (or) for equivalent HRMS mass analyzer the resolution must be more than 2,40,000 at around 200 m/z.</p>
8	<p>Section 1.3b. The mass accuracy of the system should be less than 1 ppm, with both internal & external calibration standards for MS mode on 10 consecutive repeat measurements on column analysis.</p> <p>Request to amend: < 1 ppm in MS mode and < 3ppm in MSMS mode</p>	<p>The mass accuracy of the system should be less than 1 ppm, with both internal & external calibration standards for MS mode and less than 3 ppm for MSMS mode on 10 consecutive repeat measurements on column analysis.</p>

9	<p>Section 1.3c. Sensitivity: S/N ratio \geq 1500:1 or better (Proof of statement must be provided for S/N ratio) in MSMS for 1 picogram on column.</p> <p>Request to amend: We request you to please accept lab data as we don't have MSMS data mentioned on our specification sheet & Increase MS/MS sensitivity.</p>	No Change
10	<p>Section 1.4a. 30 Spectras per second or better in both MS and MS/MS Mode or 18 Hz for others</p> <p>Request to amend acquisition speed for TOF as 25 spectra per second in MS mode and 30 Spectra/sec in MSMS mode & Acquisition rate should be 12 Hz or better</p>	No Change
11	<p>Section 1.4d. Multiple reaction monitoring acquisition: Capable of MRM or TOF MRM acquisition</p> <p>Request to amend: TOF MRM or Targeted MS acquisition approaches for quantitation purpose</p>	Multiple reaction monitoring acquisition: Capable of MRM or TOF MRM acquisition or any other equivalents
12	<p>Section 1.6. Desolvation Temperature: >500 deg C</p> <p>Request to amend: >400 deg C</p>	The upper limit of the desolvation temperature must be more than 400 degree C , which should be programmable for every solvents & compounds.
13	<p>Section 2.1. Pump - System Delay Volume: < 400μl, independent of system backpressure (with standard mixer) & pH Range: 1.0 – 12.0.</p> <p>Request to amend: Add “or additional mixer” & pH range: 2–12</p>	Pump - System Delay Volume: < 400 μ l, independent of system backpressure (with standard mixer or additional mixture) & pH Range: 2.0 – 12.0
14	<p>Section 2.2. Auto sampler - The carryover of the autosampler must be less than 0.002% or better.</p> <p>Request tot amend: Carryover: < 0.004%</p>	The carryover of the autosampler must be less than 0.004% or better.

15	<p>Section 2.4. PDA Detector - Flow Cell Volume < 1μl for 10 mm path length & Wavelength range: 190-800 nm or better.</p> <p>Request to amend: Flow Cell Volume < 2.5 μl or less with 10 mm flow cell & Wavelength range: 190-700 nm.</p>	No Change
16	<p>Section 2.5. Column Oven</p> <p>Request to amend: Capable to accommodate 3 or more columns. Peltier technology for heating and cooling.</p>	No Change
17	<p>Section 2.6. Column</p> <p>Request to amend: Sub 2 microns UHPLC columns to be supplied</p>	<p>a. Sub 2 microns C18 UHPLC columns for the analysis should be supplied with a pH level of 2 – 12.</p> <p>b. Sub 2 microns Hilic UHPLC Columns for the analysis should be supplied with a pH level of 2 – 12</p>
18	<p>Section 7. Others. The system should have future upgradation option to Gas Chromatography</p> <p>Request to amend: Remove this point & Add option to upgrade current system with Ion Mobility</p>	No Change



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COMMERCIAL QUERIES AND CLARIFICATION

TENDER NUMBER - IISERT/PUR/0013/20

DATE: 31/05/2021

Sr. No	Query/Clarification Sought	Clarification / Amendment
	NIL	NIL