



## INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH

### TIRUPATI

#### CLARIFICATION ON TENDER NUMBER - IISERT-PUR-0242-16

#### ITEM DESCRIPTION- PROCUREMENT OF HIGH-RESOLUTION ADVANCED MASS SPECTROMETER

Refer our Press Tender Notice No. IISERT/S&P/04/17 dated 24.11.2017 for procurement of HIGH-RESOLUTION ADVANCED MASS SPECTROMETER. Tender Reference Number - IISERT-PUR-0242-16.

Pre-Bid meeting was held on October 24<sup>th</sup>, 2017 at 16.00 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 and Annexure-III

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 [www.iisertirupati.ac.in](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

08.11.2017

Sd/-  
Assistant Registrar (S&P)



ANNEXURE -II

**IISER TIRUPATI**  
**PRE-BID CONFERENCE FOR PROCUREMENT OF HIGH-RESOLUTION ADVANCED MASS SPECTROMETER**  
**TECHNICAL QUERIES AND CLARIFICATION**

TENDER NUMBER - IISERT-PUR-0242-16

DATE: 06.11.17

S.No	Query/Clarification Sought	Clarification/Amendment
01.	<p><b>Page No. 22, Chapter 4</b></p> <p>A vendor suggested that the maximum flow rate for ESI and APCI Probe should be 1 mL/min instead of the specified 2 mL/min since 2 mL/min flow seemed too high against their available technology.</p>	<p><b>Page No. 22, Chapter 4</b></p> <p>The maximum flowrate of 1 mL/min required for ESI and APCI is also accepted.</p>
02.	<p><b>Page No. 22, Chapter 4</b></p> <p>Some of the vendors requested to change the tandem mass analysis with MS<sup>n</sup> capability up to n = 2 or 3.</p> <p>Two vendors suggested to accept insource fragmentation as equivalent to MS<sup>2</sup>.</p>	<p><b>Page No. 22, Chapter 4</b></p> <p>We require tandem mass analysis with MS<sup>n</sup> capability of n&gt;3. For our application, at least n = 4 is particularly required for the structural characterization of unknown (not reported so far) metabolites/lipids, transient reaction intermediates, and organic molecules which are intercepted directly from complex mixture (<i>e.g.</i>, direct sampling at ambient conditions from the reaction vial in bulk and from Tissue for DESI imaging) without the use of HPLC.</p> <p>In source fragmentation is not considered as MS/MS for the tandem mass analysis with multistage CID as that will have no selectivity to the specific analyte among many directly captured (without the use of HPLC) from the complex mixture as mentioned above.</p> <p><b>Hence tender specification prevails.</b></p>

03.	<p><b>Page No. 23, Chapter 4</b></p> <p>A vendor requested to change the UHPLC pumps from quaternary to binary.</p>	<p><b>Page No. 23, Chapter 4</b></p> <p>Both quaternary and binary pumps in the UHPLC are accepted.</p>
04.	<p><b>Page No. 22, Chapter 4</b></p> <p>A vendor has requested to amend the DESI source specification requirement to accommodate 2 slides instead of 3 slides.</p>	<p><b>Page No. 22, Chapter 4</b></p> <p>We accept that minimum of two microscopic slide holders are required in the DESI source.</p>
05.	<p><b>Page No. 22, Chapter 4</b></p> <p>Some vendors questioned on low acquisition speed – The specification specifies &gt; 4 Hz as speed for high resolution (FWHM 40000). Vendors requested to increase it to <math>\geq 15</math> Hz.</p>	<p><b>Page No. 22, Chapter 4</b></p> <p>Tender specifications are modified as give below:</p> <p>Read minimum acquisition speed required as <math>\geq 10</math> Hz</p>
06.	<p><b>Page No. 22, Chapter 4</b></p> <p>A vendor has requested to specify the resolution 40,000 at m/z 1000 instead of the range of m/z 200-1000.</p>	<p><b>Page No. 22, Chapter 4</b></p> <p>The high resolution is a critical requirement at the mass range of small metabolites/organic molecules and peptides/proteins that are captured from complex mixtures when no molecular fractionation using HPLC will be used. We will appreciate even better resolution if that can be offered.</p> <p><b>Hence tender specification prevails.</b></p>
07.	<p><b>Page No. 22, Chapter 4</b></p> <p>A vendor has requested to specify the S/N &gt; 100 for 200 fg of MS standard (e.g., reserpine)</p>	<p><b>Page No. 22, Chapter 4</b></p> <p>Tender specifications are modified as give below:</p> <p>Read S/N &gt; 100 for 200 fg of MS standard (e.g., reserpine).</p>

08.	<p><b>Page No. 22, Chapter 4</b></p> <p>A vendor has requested to reduce the desolvation temperature from 500 °C to 400 °C at the ionization source.</p>	<p><b>Page No. 22, Chapter 4</b></p> <p>Tender specifications are modified as give below: Read Desolvation temperature as 400 °C</p>
09.	<p><b>Page No. 24, Chapter 4</b></p> <p>A vendor mentioned that 8000 psi is too high in their nano LC system. They can provide nano LC system that can be used in all the applications in much less than 4000 psi as the flows in their system are very less compared to that of a normal HPLC/UHPLC. So they requested to reduce it to 5500 psi.</p>	<p><b>Page No. 24, Chapter 4</b></p> <p>We expected the minimum operating pressure 8000 psi for satisfactory results using the said columns and specified particle sizes at the flow rate of at least 300 nL/min. However, if a system can provide the equivalent or better separation at lower psi, we will consider that for further evaluation.</p> <p><b>Tender specifications prevail.</b></p>
10.	<p><b>Page No. 24, Chapter 4</b></p> <p>A vendor requested to change the scanning range of the PDA detector to 190-700 nm.</p>	<p><b>Page No. 24, Chapter 4</b></p> <p>Read PDA detector scan range as 190-700 nm.</p>



ANNEXURE -III

IISER TIRUPATI

**PRE-BID CONFERENCE FOR PROCUREMENT OF HIGH-RESOLUTION ADVANCED MASS SPECTROMETER**

COMMERCIAL QUERIES AND CLARIFICATION

TENDER NUMBER - IISERT-PUR-0242-16

DATE : 25.10.17

S.No	Query/Clarification Sought	Clarification / Amendment
01	<b>Page No. 17, Chapter 3</b> <b>Warranty / Support : Three years of comprehensive warranty</b>	<b>Page No. 17, Chapter 3</b> <b>Amended to Five years of Comprehensive warranty</b> <b>It may now be read as “ Warranty / Support : Five years of comprehensive warranty”</b>