INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH

PUNE

CLARIFICATION ON TENDER NUMBER - IISER-PUR-1363-19

ITEM DESCRIPTION- PROCUREMENT OF ELECTROCHEMICAL MASS SPECTROMETER WORKSTATION

Refer IISER Pune open tender number IISER-PUR-1363-19 dated 18.3.2020 for procurement of electrochemical mass spectrometer workstation.

Pre-Bid meeting was held on May 12th, 2020 at 3.30 PM via video conferencing 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 / additons / 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 will remain unchanged. No more correspondence in this regard will be entertained

The meeting ended with vote of thanks to the Chair

Sd/-

12.5.2020 Assistant Registrar (S&P)

ANNEXURE -II

IISER PUNE

PRE-BID CONFERENCE FOR PROCUREMENT OF ELECTROCHEMICAL MASS SPECTROMETER WORKSTATION

TECHNICAL QUERIES AND CLARIFICATION

TENDER NUMBER - IISER-PUR-1363-19 DATE : 13.5.2020

S.No	Query/Clarification Sought	Clarification / Amendment
1	**Chapter 4; Page 20** Pumping speed of turbomolecular pump (60 l/s)	**Chapter 4; Page 20** The vacuum module should have the following specs : • UHV 60 l/s turbomolecular pump set, providing an ultra-high vacuum environment for mass spectrometer operation with: - 60 l/s turbomolecular pump

2	**Chapter 4; Page 20** Electrochemical mass spectrometer software	**Chapter 4; Page 20** Quantitative analysis software, with data output in **pressure, ppm, percentage etc.**
3	**Chapter 4; Page 20** Resolution of mass spectrometer	**Chapter 4; Page 20** Peak profile display of any user selected atomic mass span with user selectable mass increment from **0.5 amu or better**.
4	**Chapter 4; Page 20** Trend analysis display	**Chapter 4; Page 20** Trend analysis display of partial pressure of **10 (or better)** mass channels vs. time.
5	**Chapter 4; Page 21** Scan speed	**Chapter 4; Page 21** The system should have soft ionisation technique with demonstrable stable threshold ionisation energy curves below 20 eV, for proper determination of complex organics. The Ionisation energy should be programmable from 0-150 eV. It should have trend analysis feature to simultaneously analyse many mass numbers. It should have fast scan speeds **of 140 measurements per second or better**.
6	**Chapter 4; Page 21** Communication port	**Chapter 4; Page 21** It should have options for **RS232, USB etc.,** interfaces for communication. It should be capable of taking in analogue inputs for simultaneous reading with MS data.
7	**Chapter 4; Page 21** DEMS of dissolved gases in liquids through membrane inlet mass spectrometry	**Chapter 4; Page 21** It should be capable of Differential Electrochemistry by analysing dissolved gases in liquids through Membrane Inlet Mass Spectrometry.

8	**Chapter 4; Page 21** DEMS direct probe inlet	**Chapter 4; Page 21** DEMS direct probe inlet, 4 mm diameter. A membrane inlet probe configured with nanoporous membrane material for direct insertion to electrochemistry cells, providing a fast response MS interface for analysis of reaction products within the cell.
9	**Chapter 4; Page 21** Mass flow controller	**Chapter 4; Page 21** It should, apart from being Differential electrochemistry capable should have Online electrochemistry integrated for 12 upto 250ul/min carrier flow controlled by a flow controller so that this capillary can be connected to the cell outlet. 2 MFCs to be provided, one for differential measurements, other for user desired calibrations.
10	**Chapter 4; Page 22** Electrochemical cells	**Chapter 4; Page 22** Also for applications where online electrochemical MS, OEMS, from an existing cell or reactor is required, a range of standard inlet options should be available offering both evolved off-gas and dissolved species analysis solutions. It should be supplied with an ultra-low flow capillary inlet with flow range upto 250 μL/min. Electrochemical cells that can be interfaced to the DEMS system should include selected models from Redoxme AB (DEMS cell), and EL-Cell (DEMS cell) and they should be provided.

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PRE-BID CONFERENCE FOR PROCUREMENT OF ELECTROCHEMICAL MASS SPECTROMETER WORKSTATION

COMMERCIAL QUERIES AND CLARIFICATION

TENDER NUMBER - IISER-PUR-1363-19 DATE : 13.5.2020

S.No	Query/Clarification Sought	Clarification / Amendment
1.	**Provision for making ONLINE PAYMENT for tender fees, EMD, or any other fees, incidentals to be provided due to lockdown.**	Yes, ONLINE PAYMENT for tender fee and EMD amount can be deposited in IISER PUNE Bank account through net banking as mentioned below. **Name-IISER PUNE** **Bank-State Bank of India** **Branch-NCL Campus Branch, PUNE 411008** **Current A/c No. 30042605732** **IFSC-SBIN0003552**