



INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH
PUNE

CLARIFICATION ON TENDER NUMBER - IISER-PUR-0666-19

ITEM DESCRIPTION- SETTING UP OF AN ELECTRON MICROSCOPY FACILITY

Refer our Press Tender Notice No.IISER/S&P/06/19 dated 20.11.2019 for setting up of an electron microscopy facility at IISER Pune under e-procurement mode on CPP portal. Tender Reference Number - IISER-PUR-0666-19.

Pre-Bid meeting was held on November 27th , 2019 at 3.00 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

27.11.2019

Sd/-
Assistant Registrar (S&P)



IISER PUNE

PRE-BID CONFERENCE FOR SETTING UP OF AN ELECTRON MICROSCOPY FACILITY AT IISER PUNE

TECHNICAL QUERIES AND CLARIFICATION

TENDER NUMBER - IISER-PUR-0666-19

DATE : 27.11.19

S.No	Query/Clarification Sought	Clarification / Amendment
1	<p>Page No - 20, Point XVII</p> <p>Energy filter specifications include the following: “Energy resolution is expected to be 10 eV (ten electron volts) (or better) for imaging and 1 eV (one electron volt) (or better) for spectroscopy.”</p> <p>Some models contain Energy Filter only and not Spectroscopy. Kindly consider to delete the words in the line as given below.</p> <p>“Energy resolution is expected to be 10 eV (ten electron volts) (or better) for imaging”.</p>	<p>Page No - 20, Point XVIII is amended to:</p> <p>“The Cryo-TEM should either have an in-column or post-column energy filter. The energy filter (EF) will be used mainly for zero energy-loss imaging of biological samples (most often frozen protein samples or sectioned frozen biological materials or whole cells) and, less frequently, for electron energy loss spectroscopy (EELS). Energy resolution is expected to be 10 eV (ten electron volts) (or better) for imaging. The EF should have minimal geometrical distortions, preferably less than 1% (one percent). The alignment and tuning of the</p>

		filter is expected to be as automatic as possible. “
2	<p>Page No -20, Point XXI (v)</p> <p>In principle it is possible to use the Imaging filter at 80, 200 and 300 kV, However for SPA some products supports 200 and 300 kV.</p> <p>Data collection is not recommended at 80 kV for SPA.</p> <p>Any other voltage below 200 KV and above 300 KV is a non-standard and without any specifications</p> <p>If 80 kV alignment is needed, then this is to be mentioned separately, as this will be priced separately.</p>	<p>Page No -20, Point XXI (v) is amended to</p> <p>“It should be possible to use the EF at 200 and 300 kV (two hundred and three hundred kilovolts). The filter alignments for above voltages are expected to be provided.”</p>
3	<p>Page No - 21, Point XXXV</p> <p>Formats for file saving include “eg .mrc, .tiff, .jpeg, .txt, .xls etc”. Please exclude .xls.</p>	<p>Page No - 21, Point XXXV is amended to</p> <p>“IISER Pune will expect that the acquired data & metadata can be exported from the proposed Cryo-TEM system in multiple formats (eg .mrc, .tiff, .jpeg, .txt, etc). Details of the proposed software should be included in the tender submission along with any known, or suspected, incompatibilities with other software packages.”</p>
4	<p>Page No - 21, Point XXIX</p> <p>To enable MicroED data collection, the CMOS camera should be operable in video mode, which is not mentioned.</p>	<p>Page No - 21, Point XXIX is amended to</p> <p>“A fast CMOS camera, operable in video mode, is expected just beneath the fluorescence screen which can be used for single-particle, tomography and micro-electron diffraction. The size of the sensor should be at least 4K x 4K (four thousand by four thousand) pixels. This general-purpose camera is expected to be either retractable or in a near-axis position and housed in a manner compatible with</p>

		easy and automated operation with a direct detection camera (Specification mentioned below). The camera should be fully embedded with data collection/application software and hardware.
5	<p>Page No - 22, Point X</p> <p>“BIDDER should provide a proper frame alignment software to align the movie frames of collect movie images using the detector.”</p> <p>Query/Note The frame alignment software to align the movie frames of collected images on one of the bidders Direct Detection Camera is done using a GPU based real-time, in line correction algorithm.</p> <p>Please comment if “off-line” or “in-line” capability is required.</p>	<p>Page No - 22, Point X, is amended to</p> <p>“BIDDER should provide a proper frame alignment software to align the movie frames of collected images using the detector with in-line and off-line correction algorithm.”</p>
6	<p>Page No - 22, Point XLI</p> <p>“Automatic image acquisition software for single particle, tomography Cryo-TEM and electron diffraction” has been mentioned. Image acquisition for electron diffraction is manual and hence has to be excluded from automated image acquisition.</p>	<p>Page No - 22, Point XLI, is amended to</p> <p>“Automatic image acquisition software for single particle, tomography Cryo-TEM and image acquisition options for electron diffraction including the latest upgrades/updates is expected to be supplied free of cost, installed and supported by the provider. Details of the proposed software should be included in the tender submission along with any known, or suspected, incompatibilities with other software packages. Automatic image acquisition software should be provided free of cost. Automatic image acquisition software should be compatible with direct electron detection camera.</p>

7	<p>Page No - 23, Point XV:</p> <p>Clarification regarding use of the term 'montage' for 3D tomography</p>	<p>Page No - 23, Point XV:</p> <p>No change in tender specifications.</p>
8	<p>Page No - 24, Point VIII</p> <p>“The automatic alignment available should at least include: Full Gun Alignment, Eucentric Height, comafree and automatic objective stigmatation.”</p> <p>In one of the bidder system, instead of automatic alignment, the same specifications are referred to as pre-set alignment free.</p>	<p>Page No - 24, Point VIII</p> <p>The bidders are requested to give the specifications of the 'pre-set alignment free' configuration and thus demonstrate that the requirements are satisfied.</p>