



INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH

PUNE

CLARIFICATION ON TENDER NUMBER - IISER-PUR-1483-14

ITEM DESCRIPTION- PROCUREMENT OF SPECTRAL CONFOCAL LASER SCANNING MICROSCOPE

Refer our Press Tender Notice No.IISER/S&P/15/14 dated 27.1.2015 for procurement of Spectral Confocal Laser Scanning Microscope. Tender Reference Number - IISER-PUR-1483-14.

Pre-Bid meeting was held on February 3, 2015 at 2.00 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 will remain unchanged. No more correspondence in this regard will be entertained

The meeting ended with vote of thanks to the Chair

3.2.2015

Sd/-
Assistant Registrar (S&P)



IISER PUNE

**PRE-BID CONFERENCE FOR PROCUREMENT OF SPECTRAL CONFOCAL LASER
SCANNING MICROSCOPE**

TECHNICAL QUERIES AND CLARIFICATION

TENDER NUMBER - IISER-PUR-1483-14

DATE : 3.2.15

S.No	Query/Clarification Sought	Clarification / Amendment
1.	<p>Fully Motorized & Computer controlled Inverted Fluorescence Research Microscope: Point 7. You have mentioned "High Resolution Semi-Plan Achromat Objectives". This term is normally used by one particular brand. All other people use Plan Fluor. So, we request you to add Plan Fluor objectives. So, it can be read as "High Resolution Semi Plan-Achromat / Plan Fluor Objectives".</p>	<p>Clarification and Amendment: High resolution confocal microscopy corrected objectives of the Semi Plan Achromatic/ Plan Fluor/ Plan Achromat type should be offered in the magnifications/NA 10x/0.30, 20x/0.50 & 40x/1.30-1.40 oil 60/63x/1.40 oil immersion with complete DIC accessories for all objectives.</p>

<p>2.</p>	<p>Spectral Confocal Laser Scan Head with built-in/separate detectors:</p> <p>Point 12. Scanner should be capable of acquiring minimum of 7 fps @ 512 x 512 pixel resolution.</p> <p>In this point, there is a confusion. Mainly Spectral scanner speed is normally determined by the "Spectrum captured in shortest time"; not by frames per second and Galvano scanner speed is determined by frames per second. We request the following changes in this. Either you remove the word SPECTRAL from heading or amend the point 12 asScanner should be capable of acquiring minimum of 7 fps @ 512 x 512 pixel resolution (Spectral / Non-spectral) and can add "system will be given preference which can capture wider spectrum in shortest time".</p> <p>In case of Nikon A1 system, we can capture from 380nm to 700nm (though we can go upto 740nm) in just 0.6 sec whole spectrum.</p>	<p>Clarification and Amendment:</p> <p>Scanner speed of at least 4fps. Spectral scan speed for atleast 1 second for the whole scan.</p>
<p>3.</p>	<p>Laser Module Please confirm if you want all the Solid State Lasers?</p>	<p>Clarification:</p> <p>The following laser lines must be offered: 488 nm for Alexa 488, FITC, GFP fluorophores. 458 and 514 nm for CFP and YFP fluorophores, 555/559/561 nm for TRITC, Rhodamine, Texas Red, Cy3, PE, PI fluorophores. 635/639 nm for Alexa 633, DRAQ 5, Cy5 fluorophores. 405/408 nm for DAPI, Hoechst, Cascade Blue, Calcofluor fluorophores and for photoactivation and photoconversion. They can be a combination of gas, diode or solid state lasers of high power for all confocal applications.</p>
<p>4.</p>	<p>Optional Accessories</p> <p>Bidder asked for "High resolution cooled monochrome CCD Digital Camera with 1.4 million pixel chip resolution and 12 megapixel digital resolution".</p>	<p>Clarification and Amendment:</p> <p>This is an optional accessory. The camera can be the following: CCD/CMOS of 1.4 million pixel resolution capable of imaging a speed of approximately 20 fps at resolution of 12 bit.</p>

	<p>Recently Nikon has introduced High Resolution FX-format Monochrome Cooled CMOS sensor Camera with effective 16.25 Mega pixel resolution (Not Interpolated). It gives you high resolution with high speed (45 fps max) and high sensitivity (QE @ 77%).</p> <p>So, we request you to add CMOS cameras with CCD Camera. It can be read as "High resolution cooled monochrome CCD / CMOS Digital Camera with 1.4 million pixel chip resolution and 12 megapixel digital resolution".</p>	
5.	<p>An anti-vibration table with air damping for the complete microscope system</p>	<p>Clarification:</p> <p>Anti-vibration table should have an active platform with an air compressor equivalent which can continuously dampen any vibrations.</p>
6.	<p>Spectral Confocal Laser Scan head with built-in/separate detectors: 3. Scan head should be capable of simultaneous detection and separation of at least 2 fluorophores and should be possible to separate up to 4 fluorophores sequentially.</p>	<p>Clarification and Amendment:</p> <p>The scan head should be capable of simultaneous detection and separation of at least 3 fluorophores and sequential detection of at least 4 fluorophores.</p>
7.	<p>All fluorescence detectors of the scan head should be with filter free spectral detection.</p>	<p>Clarification and Amendment:</p> <p>At least 2 fluorescent detectors should be capable of filter free detection.</p>

8.	System should be capable of ONLINE separation and display of over-lapping emission signals through emission finger printing technique.	Clarification and Amendment: System should be capable of separation and display of overlapping emission signals through emission fingerprinting technique.
9.	The laser scanner should have dual scan capability of real ROI with fast scan for bleaching/photo-activation & normal scan for Imaging, to conduct experiments like FRAP, FLIP, photo activation, photo-conversion and photo-bleaching.	Clarification: The laser scanner should be capable of dual scan with ROI capability of all shapes along with normal scan and fast scan required for photobleaching/photoactivation/photoconversion ability
10.	Scanner should be capable of acquiring minimum of 7fps @ 512x512 pixel resolution.	Clarification and Amendment: Scanner speed of at least 4fps @ 512 x 512 pixel resolution. Spectral scan speed for atleast 1 second for the whole scan.
11.	At least one high-sensitivity detector (For example: GaAsP/Hybrid/etc.)	Clarification and Amendment: At least two channels with high sensitive detection.
12.	A high resolution cooled monochrome CCD Digital camera with 1.4 million pixel chip resolution and 12 megapixel digital resolution, controlled by the same confocal software for high resolution fluorescence imaging. Pixel size: 6.45 uM.	Clarification and Amendment: This is an optional accessory. The camera can be the following: CCD/CMOS of 1.4 million pixel resolution capable of imaging a speed of approximately 20 fps at resolution of 12 bit.
13.	Fast scanner (for example, resonant type) for calcium imaging	Clarification and Amendment: An additional scanner capable of enhancing the speed of confocal imaging may be quoted.
14.	Point No.1-2, Piezo stage- Leica offers stage mountable Galvo stage in place of Piezo stage. We request you to amend the specification to Galvo/ Piezo based stage for for better Z resolution.	Clarification and Amendment: A mountable Piezo stage or Galvo stage for better Z resolution should be available for faster Z imaging.

15.	<p>Point No.I-7 where in bidder asked for Semi-Plan Aplanachromat objectives 40x/1.30-1.40. Since it is a higher resolution objective, Leica manufactures only Aplanachromatic objective of 40x/1.3 NA for confocal applications. Moreover our 40x/1.3NA is λ blue corrected by default. We request you to kindly amend your specification to Plan Aplanachromat 40x/1.3 in place of Semi-Plan Aplanachromat 40x/1.3. As there's a huge price difference between Plan Aplanachromat & Semi-Plan Aplanachromat, this amendment will definitely lead to a fair comparison of price.</p>	<p>Clarification and Amendment:</p> <p>High resolution confocal microscopy corrected objectives of the Semi Plan Aplanachromatic/ Plan Fluor/ Plan Aplanachromat type should be offered in the magnifications/NA 10x/0.30, 20x/0.50 & 40x/1.30-1.40 oil 60/63x/1.40 oil immersion with complete DIC accessories for all objectives.</p>
16.	<p>Point No.I-10, bidder asked for Automated Laser or LED based dedicated focus drift control device to maintain the focus for long-term time lapse imaging experiments. From this point we understand that by mentioning the dedicated device, you wish to purchase a focus drift control device with a light source which is not used for excitation and reduce the interference of any emissions from samples. We request you to kindly explain, if it's different from our understanding during the pre-bid meeting.</p>	<p>Clarification:</p> <p>Automated LED or Laser based dedicated focus drift control device to maintain focus for long term time lapse imaging experiments should be available as a part of the system.</p>
17.	<p>Point No.IV- Control Computer. We do not have flexibility to choose different configurations of PC as the same is a fixed configuration and tested by factory. It's the best configuration designed by our R&D team for meeting the various confocal imaging application. Hence we request you to kindly amend the following specification of control computer.</p>	<p>Clarification and Amendment:</p> <p>If a factory specified computer is not used then the companies are recommended to stick as closely as possible to the requested specifications. A factory specified computer designated of different specifications for the system may be used.</p>



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SCANNING MICROSCOPE**

COMMERCIAL QUERIES AND CLARIFICATION

TENDER NUMBER - IISER-PUR-1483-14

DATE : 3.2.15

S.No	Query/Clarification Sought	Clarification / Amendment
	-----NIL-----	-----NIL-----