



CSIR-INDIAN INSTITUTE OF CHEMICAL BIOLOGY

A Unit of Council of Scientific & Industrial Research
An Autonomous Body of Ministry of Science & Technology, Government of India
4, Raja S. C. Mullick Road, Jadavpur, Kolkata – 700032 (W.B.) India



IICB/Pur/599/616/64/2019-20
Tuesday, 17th March, 2020

To

M/s Leica Microsystems – A Division of DHR Holding India Pvt. Ltd.
Mangalam Business Centre, Suite 607; 22, Camac Street,
Block A & B, 6th Floor, Kolkata – 700 016.
E-mail: contact.india@leica-microsystems.com

Sub: Disposal of representation

Ref : Your letter No. Nil dated 11.03.2020

Dear Sir,

We are in receipt of your above referred representation dated 11.03.2020 regarding procurement of "High resolution confocal laser scanning microscope", the Technical Sub Committee (TSC) of CSIR-IICB vetted, examined and scrutinized your representation and the Committee observed as follows :

1. Concern: RFP filter is not quoted".

- RFP and Cy3 have equivalent excitation / emission range.

2. Concern: The power of quoted 405nm laser under item no: 44 in the Technical Bid is not mentioned. As per the technical information available in Zeiss LSM 980 Brochure Page No: 31, the power of 405nm Laser is 14mw ex fiber only. The power is insufficient required for Photo bleaching /Photo activation capability and also a major deviation from the specification asked in the Tender. Zeiss LSM 980 Technical Brochure enclosed. Please refer to page No. 31 (highlighted). The 405nm Laser Power is much lower than the specification asked in the Tender. Therefore, Zeiss is not meeting tender specification and it is a major deviation".

-The output power of the laser is ex fiber power and Zeiss has certified that it can perform Photo bleaching /Photo activation.

3. Concern: The quoted Zeiss LSM 980 System is capable of acquiring only 13 frames per second @ 512x512 pixel resolution in spectral mode. To attain the tender specified speed, they should have quote High Speed Scanning mode available with Zeiss LSM 980 with Airyscan 2 module.

- Zeiss has attached a document and certified that their quoted system can reach up to 17 FPS.

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4. Concern: In position number 51, Zeiss has quoted LSM 980 with just a simple contrast enhancing Deconvolution post-process module. No deconvolution module can attain the resolution asked in the tender. To match the tender specs and achieve Lateral resolution of 120-140 nm Zeiss should have quoted their Airyscan 2 module. The Technical Brochure of Airyscan 2, Page No:6, (which is available in public domain), clearly states that to attain a lateral resolution of 120-140nm, Zeiss LSM 980 must include AiryScan2.

- The clarification provided by Zeiss is satisfactory: *"We have quoted one module by which you can reduced the pinhole and can capture the images after that the images will be automatically deconvolved by adaptive deconvolution and produce the images which is having enhanced the resolution up-to 120-140 nm. The process is similar like OSR of Olympus and Lightning of Leica. But Zeiss Germany is not putting and pseudo name to the deconvolution phenomenon, rather Zeiss Germany is clearly describing deconvolution process as deconvolution. Airy scan is a confocal based super resolution module like CW-STED and it can enhance the resolution 1.5 times."*

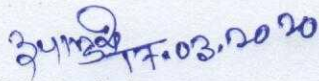
5. Concern: The Quoted Zeiss AxioCam 712 mono, Item No. 67 is a normal CMOS camera and is not a "Scientific" sCMOS Camera as asked in the tender specs. @ Full resolution, the quoted camera can capture only at a maximum speed of 23 FPS, and 30 FPS @ Full Frame in Live viewing mode only (not capturing). The pixel-size of the camera is much smaller 3.45 micron only, making the camera very less sensitive compared to the asked tender specification The quoted camera AxioCam 712 mono doesn't at all fall into the league (of sCMOS) that has been asked in the tender specs. It is much inferior device as it has much lower speed and much smaller pixel size than the tender specification.

-In their clarification Zeiss has certified that the offered camera is suitable for high resolution imaging and the active pixel size (fill factor) is 3.45 micron not the whole pixel size. They have also certified that the camera can capture at a maximum speed of up to 66 FPS with 1024X1024 resolution. The committee finds the camera is suitable and will serve the purpose based on the clarifications and certificates provided by Carl Zeiss.

It may kindly be noted that after reviewing all the concerns and clarifications, the Technical Sub Committee (TSC) has come to the conclusion that the specifications provided by the company will serve the purpose of CSIR-IICB and also price bid may be opened as soon as possible.

Please provide your response, if any latest by 20.03.2020 and any clarification / response after the stipulated date will not be entertained any more.

Yours faithfully,


(A K Pandey)

Stores & Purchase Officer