



**भारतीय विज्ञान शिक्षा एवं अनुसंधान संस्थान पुणे**  
**INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH PUNE**  
**निविदा संख्या पर प्रीबिड स्पष्टीकरण - IISER/PUR/0780/23**  
**PREBID CLARIFICATION ON TENDER NUMBER - IISER/PUR/0780/23**

**वस्तु विवरण - स्पिनिंग डिस्क कन्फोकल माइक्रोस्कोप की खरीद**

**Item Description- Procurement of Spinning Disk Confocal Microscope**

स्पिनिंग डिस्क कन्फोकल माइक्रोस्कोप की खरीद के लिए संस्थान की वेबसाइट [www.iiserpune.ac.in](http://www.iiserpune.ac.in) और सीपीपी पोर्टल पर 04/09/2023 को प्रकाशित ग्लोबल टेंडर देखें।

Refer a Global tender published on Institute website [www.iiserpune.ac.in](http://www.iiserpune.ac.in) and on CPP Portal on 04/09/2023 for procurement of Spinning Disk Confocal Microscope.

प्री-बिड मीटिंग 14/09/2023 को अपराह्न 3.00 बजे आयोजित की गई और बैठक का कार्यवृत्त निम्नानुसार है:

Pre-Bid meeting was held on 14/09/2023 at 3.00 PM and minutes of meeting is as under:

प्रारंभ में, समिति ने सभी सदस्यों और संभावित बोलीदाताओं के प्रतिनिधियों का स्वागत किया और सामान्य तौर पर निविदा के दायरे की जानकारी दी और उसके बाद सहायक कुलसचिव (भांडार एवं क्रय) से बोलीदाताओं को निविदा की मुख्य विशेषताओं के बारे में जानकारी देने का अनुरोध किया।

At the outset, the committee welcomed all the Members and the representative of the Prospective Bidders and briefed in general the scope of the tender and thereafter requested the Assistant Registrar (S&P) to brief the bidders on the salient features of the tender.

उपस्थित प्रतिनिधि दिए गए उत्तरों से संतुष्ट थे और यह सूचित किया गया था कि प्री-बिड कॉन्फ्रेंस के दौरान की गई चर्चा के अनुसार दिए गए सुधार / परिवर्धन / स्पष्टीकरण को IISER पुणे की वेबसाइट पर होस्ट किया जाएगा और सभी संभावित बोलीदाताओं को बोली दस्तावेजों में निर्धारित अनुसार अपनी बोली जमा करने से पहले प्री-बिड सम्मेलन की कार्यवाही का संज्ञान लेना आवश्यक है।

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.

हमारी आईआईएसईआर वेबसाइट [www.iiserpune.ac.in](http://www.iiserpune.ac.in) पर जारी नोटिस के अन्य नियम और शर्तें अपरिवर्तित रहेंगी। इस संबंध में और कोई पत्राचार नहीं किया जाएगा

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.

बैठक अध्यक्ष के धन्यवाद प्रस्ताव के साथ समाप्त हुई।

The meeting ended with vote of thanks to the Chair

14/09/2023

14/09/2023

Sd/-

सहायक कुलसचिव (भांडार एवं क्रय)

Assistant Registrar (S&P)

## TECHNICAL AND COMMERCIAL QUERIES AND CLARIFICATION

### PRE-BID CONFERENCE FOR PROCUREMENT OF SPINNING DISK CONFOCAL MICROSCOPE

| S. No | Query/Clarification Sought  | Clarification / Amendment  |
|-------|---|--|
| 1     | Requesting you to remove upgrade capability of 25 micron microlens disk as Evident Spinning Sisk systems do not have the capability of upgradation to 25micron disks.   | <b><u>Tender specifications amended to</u></b><br>The spinning disk module should have enhanced nipkow microlens of 50/40 micron disk. It should be motorized with a minimum 4000 rpm or better and should communicate to through software seamlessly. |
| 2     | Please change the power of 405nm laser from 100mW to 50mW   | <b><u>Tender specifications ammended to</u></b><br>405 nm: 50 mW,488 nm: 100 mW,561 nm: 100 mW,640 nm: 100 mW.   |
| 3     | Request to keep current specifications as upto 2 x or better for microscope   | <b><u>Tender specifications ammended to</u></b><br><br>A magnification changer of ~2X or better should be included (which can be used with different magnification objectives) for effective use of SORA and super-resolution algorithm                |
| 4     | Spinning disk module should have enhanced microlens of 50 micron disk and should have the capability to on site upgrade to 25 micron microlens disk and SORA OR Lattice Illumination based Super Resolution system , it should be motorized with minimum 4000 rpm upto 15000rpm and should communicate to through software seamlessly. System should have built in technology tocapture perform Uniform & homogeneous illumination over the field of view. System should have spectral range capability of 400-750nm ( excitation range for NIR capability ). | Tender specification prevails  |

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|---|---|--|
| 5 | It should include a minimum 3 Position slider to hold dichroic mirrors. Dichroic mirror 405/488/568/640 and 458/514 for this position. Scanhead should include a 8- 10 position or better emission filter wheel to hold the emission filters for Dapi, GFP, RFP, CFP, YFP and Cy5.  | <b><u>Tender specifications ammended</u></b><br>It should include a minimum 3-position slider to hold dichroic mirrors. Dichroic mirror 405/488/568/640 and 458/514 for this position. The scanhead should include a 8- 10 position or better emission filter wheel to hold the emission filters for Dapi, GFP, RFP, CFP, YFP and Cy56 |
| 6 | 2D and 3D blind deconvolution module should be quoted with super-resolution, deconvolution module with single click , system should automatically take up the acquisition parameters from the acquired image to create supe resolution image for SORA spinning disk images OR Lattice based Super Resolution imaging system . Superresolution deconvolution should be capable of achieving the 100-120 nm or better resolution in XY and 300-320nm or better resolution in Z. The super resolution should be achieved by psf fitting algorithm for spinning disk OR Lattice Structured Illumination based technology. | Tender specification prevails  |
| 7 | Fully automated and motorized microlens.based Spinning disc and Super resolution system with suitable high sensitive ScMOS<br><br>Camera/Detectors and Emission filters for the entire Vis Spectrum. The quoted model should be a two-camera/dual-camera acquisition system that should include built-in internal optics, optomechanics. The two-camera ports should be available on the Spinning Disc Unit ready for camera attachment without the requirement of additional optical elements. The operation for all the components for dual camera image acquisition should be fully automated and motorized.       | Tender specification prevails  |
| 8 | For live cell imaging at standard and super resolution: The set up should not have anv cross talk issues and limit the emission signal detected due to having a narrower band emission filters. The Offered svstem should not have anv Realignment issues when the optical path is changed. A single Disk achieving the required scan speed of 6000 rpm and above with 400 fps or above will be preferred at a resolution of 512x512 pixels. The design of the 40/50um pinhole should ensure maximum confocalitv is achieved with the modern. commonly used, high NA 60x and 100x oil immersion objectives.           | <b><u>Tender specifications amended</u></b><br>The spinning disk module should have enhanced nipkow microlens of 50/40 micron disk. It should be motorized with a minimum 4000 rpm or better and should communicate through software seamlessly.   |

|   |   |                                      |
|---|---|--------------------------------------|
| 9 | <p>The offered instrument should come with a multi-mode fibre illumination with a suitable detector for optimum illumination and detection efficiency with no under or over fill of the detector, beam shaping, and additional enhancement optics to deliver optimum illumination to laser-based multi-point confocal and laser-based epifluorescence widefield microscopy. It should provide exceptional illumination optimising coupling stability and efficiency, excitation throughput, imaging uniformity and spectral range with minimal power loss, and maintain high signal to noise ratio. The information that the system has these illumination features should be available in the technical brochure of the quoted system and these should be provided with the technical bid.</p> | <p>Tender specification prevails</p> |
|---|---|--------------------------------------|