भारतीय विज्ञान शिक्षा एवं अनुसंधान संस्थान मोहाली

मानव संसाधन विकास मंत्रालय, भारत सरकार द्वारा स्थापित

सैक्टर-81,नॉलेज सिटी,प॰ ओ॰ मनोली, एस॰ ए॰ एस॰ नगर,मोहाली, पंजाब 140306

INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH MOHALI

(Established by Ministry of Human Resource Development, Govt. of India)

Sector-81, Knowledge city, PO-Manauli, SAS Nagar Mohali-140306, Punjab

PAN No. - AAAAI1781K GSTIN No:- 03AAAAI1781K2ZS

• **Phone : +91-172-2240086 & 2240121** • **Fax : +91-172-2240124, 2240266** • **http://www.iisermohali.ac.in** • **Email:** stores@iisermohali.ac.in

CPPP/Institute Website

IISERM (1280)19/20Pur Dated: 17 October 2019

NOTICE INVITING E-TENDER

Online tenders are invited on behalf of Director, IISER Mohali in **TWO BID SYSTEM** for the **Supply and installation of High Sensitive Spectral Confocal Imaging Workstation** as per technical specification and details given below and BOQ list from the original manufacturer/supplier at CPPP i. e. **https://eprocure.gov.in/eprocure/app**. Tender documents may please be downloaded from the E-procurement portal website **https://eprocure.gov.in/eprocure/app**& Institute website **www.iisermohali.ac.in.**

-sd-
(Mukesh Kumar)
Assistant Registrar (P&S)

भारतीय विज्ञान शिक्षा एवं अनुसंधान संस्थान मोहाली

मानव संसाधन विकास मंत्रालय, भारत सरकार द्वारा स्थापित

सैक्टर-81,नॉलेज सिटी,प॰ ओ॰ मनोली, एस॰ ए॰ एस॰ नगर,मोहाली, पंजाब 140306

INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH MOHALI

(Established by Ministry of Human Resource Development, Govt. of India)

Sector-81, Knowledge city, PO-Manauli, SAS Nagar Mohali-140306, Punjab

PAN No. - AAAAI1781K GSTIN No:- 03AAAAI1781K2ZS

• **Phone : +91-172-2240086 & 2240121** • **Fax : +91-172-2240124, 2240266** • **http://www.iisermohali.ac.in** • **Email:** stores@iisermohali.ac.in

E-TENDER NOTICE

Tender Ref.- IISERM(1280)19/20Pur	Dated :- 17 October 2019

Critical Date Sections

Sr.	Description	Date	Time
1.	Tender Publishing Date and time	17 October 2019	6:00pm
2.	Tender Document download start Date & Time	17 October 2019	6:00pm
3.	Bid Submission start Date &Time	17 October 2019	6:00pm
4.	Bid Submission End date and Time	14 November 2019	Upto 11:00am
5.	Tender opening Date and Time	15 November 2019	At 11:30am

Online tenders are invited on behalf of Director, IISER Mohali in **TWO BID SYSTEM** {Technical and commercial separately} for the following item(s) from the original manufacturer/supplier at CPPP i.e. **https://eprocure.gov.in/eprocure/app**. Tender documents may please be downloaded from the E-procurement portal website **https://eprocure.gov.in/eprocure/app**& Institute website **www.iisermohali.ac.in.**Tender fee in shape of DD/Banker Cheque of Rs 590/- (Non-refundable) and EMD of Rs 4,50,000/- should be submitted by DD /Banker Cheque/FDR/ Bank Guarantee in favour of the Registrar, IISER Mohali payable at Mohali. However, scanned copy of the both tender fee and EMD should be upload on website along with technical bid part. The hard copy of the same in original to be send to the address mentioned below duly superscribing the supply/work name and reference/ tender ID on the envelope and same must reach before opening the bid and if not received within due date the bid will be rejected summerly.

The Original EMD and Tender Fee should be sent to:

Assistant Registrar (P&S)
Indian Institute of Science Education and Research Mohali
Sector-81, Knowledge City, SAS Nagar, Mohali, Punjab,
India, Pin: 140306

Non-receipt of original EMD and Tender Fee will lead to rejection of tender.

Item Details: -

Sr.	Description	Qty. (in units)
1.	**Supply and installation of High Sensitive Spectral Confocal Imaging Workstation** **Technical Specifications:** **HIGH SENSITIVE SPECTRAL CONFOCAL WORKSTATION** The imaging workstation should include high sensitive spectral confocal imaging for cell lines, tissues and model organisms. The system should be available with the below mentioned configuration as mentioned below: **I. Motorized Inverted Fluorescence Research Microscope:** a) Fully Motorized Inverted Fluorescence Research Microscope for BF/DIC/Fluorescence preferably with dedicated touch screen TFT display for controlling motorized components of the microscope. b) Mot. X-Y stage with Universal sample holders for slides, 35/60 mm Petri dish, labtek chambers with multipoint, tile and mosaic imaging software. c) LED / Halogen illumination for transmitted light & 120W metal halide illumination or LED illumination with higher lifetime for Fluorescence should be offered. In case of LED Illumination in fluorescence mode, min 4 LED's should be part of the configuration (375nm, 477nm, 552nm and 640 nm or equivalent) d) Motorized 6-position DIC nosepiece, Universal Motorized Condenser NA 0.55 or better with modules for DIC, 6 position fluorescence turret for accommodating fluorescent filters for sample visualization. e) High precision Z-focus drive with step size of 15 nm or better. f) High-resolution confocal grade objectives of 10x/0.40, 20X/0.80, 40x/1.30oil, 60/63x/1.40oil immersion. g) Shift free DIC accessories for all objectives. h) Band pass fluorescent filters for DAPI, GFP, Cy3 and Cy5 should be offered. i) An active anti-vibration table with compressed air damping, breadboard table top with M-6 threading for the complete microscope system. j) **Monochrome cooled CCD camera**, 1/1.2 '' Chip with 2.3 million net effective pixel resolution (USB III based) controlled by the same confocal software for multichannel, z stack, fast time lapse wide field imaging with frame rates of 30 fps or better at full format.	**01**

k) **Facility for live cell imaging** including Incubation system with Temperature, CO2, humidity control and complete laser safety regulations should be offered. The parameters for Incubation system should be controlled by confocal software as well as TFT display of the microscope.

l) Dedicated attachment for converting Inverted Microscope to Upright Microscope for Tissue Imaging with depth up to 300 microns or better (depending on transparency of samples). Additionally one Water Dipping 20X / 1.0 WD of 2.1mm or better for deep tissue imaging should be incorporated

II. Spectral confocal imaging unit with built in high sensitive detectors:

a) Laser point scanning and Confocal detection unit with 3 channels for simultaneous detection of 3 fluorophores in high sensitivity mode. Detectors should be capable of working in Intensity and Spectral mode Imaging. System should be a combination of min or more 3 GaAsP/HyD detectors.

b) Scanner unit should have laser ports for at least 4 lasers to be integrated with the system.

c) The scanner should have real "ROI" scan capability for fast scan. Maximum scan resolution should be at least 6Kx6K or better per channel and should reduce to 16X16 resolution.

d) Scan speed should be 7-10 fps or better @ 512x512 and should be able to increase up to 200 fps@512X16 or better.

e) Transmitted PMT or Detector for laser based DIC imaging should be included.

f) The scan field diagonal should be min 18 mm or better. Scan Zoom range minimum 1X to 40X with increments of 0.1X. Scan rotation of 200 degrees or better should be available.

III. Solid State Laser module with AOTF control:

a) 405 nm,

b) 488 nm

c) 561 nm.

d) 640 nm.

All lasers should be connected to the scan head through fiber optic cable and should be controlled through AOTF or direct modulation for fast laser switching and attenuation in pixel precise synchronization with the laser scanner for Real ROI scan for FRAP, Photo activation/conversion experiments. All the laser lines should

be controlled through a computerized AOTF device for fast laser switching and attenuation.

IV. **Real time Online Hardware based Super resolution Imaging:**

a) Fully automated and motorized SR attachment with suitable high sensitive Detector for complete Vis Spectrum.

b) Lateral resolution of 120 nm or better and Axial resolution of at least 350 nm or better should be expected out of the system. Online processing of data for SR Imaging should be part of standard system.

c) Dedicated high sensitive and efficient GaAsP detector or equivalent for SR Imaging.

d) Should be able to perform live cell SR Imaging with frame rates of at least 15-20 fps @512X512 pixel resolution. All laser lines for Confocal Imaging should be used for imaging in SR mode.

e) Depth of imaging should be upto 100 micron.

V. Control computer and Monitor:

Latest 64 bit control computer with Intel Xeon Processor, DDR RAM 64 GB or better, HDD: 4TB SATA upgradable to 8 TB or better, DVD, Super Multi SATA +R/RW, Graphics card 8 GB or better, Gigabit Ethernet, Win 10 64 bit , USB 2.0/3.0, Fire wire. Large 32" LCD TFT monitor.

VI. System control and Imaging Software:

a) Software should be capable of controlling Motorised components of microscope, digital camera, confocal scan head, laser control including AOTF and Image acquisition & processing for confocal and super resolution imaging.

b) Saving of all system parameters with the image for repeatable/reproducible imaging.

c) Line, curved line, frame, Z-stack, Time series imaging capabilities.

d) Real ROI bleach for FRAP, Photo-activation/conversion experiments.

e) Standard geometry Measurements like length, areas, angles etc including intensity measurements.

f) Advanced 3D image reconstruction with rendering from a Z-stack image series.

g) Co-localization and histogram analysis with individual parameters.

h) Spectral un-mixing with fingerprinting for separation of overlapping excitation/emission spectra of fluorophores.

Additional Offline software with complete features as the main software with high end dedicated PC and monitor should be made available for image analysis.

	Note: I. Bidders should clearly specify the after sales/service/application support capabilities. II. Warranty for the complete system and additional 4 years of AMC should be mentioned clearly. III. Provide all information as regards pre-installation requirements (i.e. room, environment) for system installation. IV. Online UPS for the complete system including lasers should be included in the supply. The system should have a dedicated online branded UPS system with at least 30 min back up for the whole system. V. Detailed list of users of the system in India with contact details to be provided. **VI.** Onsite training should be available.	

NB:-

1. **The online updated Price BOQ is in INR format. If bidder want to quote other than INR please specify the quoted currency in the technical bid/part and fill the amount in same updated BOQ.**

2. **Please bifurcate the price on shipping terms i, e, Ex-works -> FCA/FOB -> CIP/CIF in price BOQ and specify the same in technical bid.**

3. **The Online bids should be submitted directly by the original manufacturer/supplier, If quotation is submitted/filled by any representative/agent/dealer then they must upload a authority certificate from the principal company.**

4. **Kindly specify the weight of the product including weight of packing for assessment of Freight charges if quoted in foreign currency.**

SUBMISSION OF TENDER

I. All bid/ tender documents are to be uploaded online at Central Public Procurement portal i.e. **https://eprocure.gov.in/eprocure/app** only and in the designated cover/ part on the website against tender ID. Tenders/ bids shall be accepted only through online mode and no manual submission of the same shall be entertained except tender fee and EMD. Late tenders will not be accepted.

II. The online bids shall be opened at the office of the Assistant Registrar (P&S), IISER Mohali, on above given date and time. If the tender opening date happens to be on a holiday or non-working day due to any other valid reason, the tender opening process will be attended on the next working day at same time and place. IISER Mohali will not be responsible for any error like missing of schedule data while downloading by the Bidder.

III. The bidder shall upload the tender documents duly filled in and stamped by the authorized signatory on each and every page. Tender not submitted/uploaded in the prescribed form and as per the tender terms and conditions shall be liable for rejection.

IV. The bidder shall upload scanned copy of the PAN Card, GST number duly signed and stamped. **Also bidders applying against 'MSME/NSIC Certificate" issued by**

appropriate Authority, should ensure that the certificate attached is relevant to the area of service/supply. For example, If the tender is for "supply & installation of Desktop" ***the certificate should be issued for activity/area of "Computer supply and services activities etc" otherwise bid will be REJECTED without notice.***

V. E-procurement system ensures locking on the scheduled date and time. The system will not accept any bid after the scheduled date and time of submission of bid.

INSTRUCTIONS

1. The Online bids should be submitted directly by the original manufacturer/supplier, If quotation is submitted/filled by any representative/agent/dealer then they must upload a authority certificate from the principal company for quoting the price otherwise such quotation will be rejected.

2. The quantity mentioned in this inquiry is and shall be deemed to be only approximate and will not in any manner be binding on the Institute. Before the deadline for submission of the online bid, IISER Mohali reserves the right to modify the tender document terms and conditions. Such amendment/modification will be notified on website against said tender ID.

3. The rates offered should be FOR Chandigarh/Mohali in case of firms situated outside Chandigarh/Mohali, and free delivery at the Institute premises in case of local firms. Supplier from outside India should mention the Ex-works/FOB/FCA/CIF/CIP price clearly. Conditional tenders will be summarily rejected.

4. In case of Ex-godown terms the amount of packaging forwarding freight etc. should clearly be indicated by percentage or lump sum amount. Institute has policy not to make any advance payments towards any purchase, Letter of credit can be opened if required.

5. THE INSTITUTE IS EXEMPTED FROM CUSTOM DUTY under notification no-TU/V/RG/-CDE(1062)/201 CUSTOM DT.30.08.2016.

6. Tax: This Institute is not exempted from the payment of GST. The current rate (i.e. percentage of GST should be clearly indicated included or excluded) wherever chargeable. Please also provide/upload the copy of PAN card, GST number duly self-attested.

7. Concessional GST is applicable for all the items purchased for Research labs vide Ministry of Finance, notification no. 45/22017 dated 14.11.2017 and 47/2017 dated 14.11.2017.

8. Bidder/s quoting in currency other than **Indian Rupee (INR**) should explicitly mention the currency in which tender quoted wherever applicable in Technical Bid along the tender documents.

9. The delivery period should be specifically stated. Earlier delivery will be preferred.

10. The firms are requested to provide/upload detailed description and specifications together with the detailed drawings, printed leaflets and literature of the article quoted. The name of the manufactures and country of manufacture should also invariably be stated. In the absence of these particulars, the quotation is liable for rejection.

11. Validity of offer: 90 days. The warranty period after satisfactory installation should be mentioned and firm should replace all manufacturing defect parts/ whole item under warranty without any extra cost including clearance, freight, taxes. Security deposit/ Bank Performance Guarantee @ 10 % of the value of supply order as per norms may be sought from the firms.

12. The right to reject all or any of the quotation and to split up the requirements or relax any or all the above conditions without assigning any reason is reserved by the IISER Mohali. For any corrigendum and addendum please be checked the website https://eprocure.gov.in/eprocure/app and http:/www.iisermohali.ac.in

13. Disputes, if any, shall be subject to jurisdiction in the court of Mohali only.

–sd-
(Mukesh Kumar)
Assistant Registrar (P&S)