

**Open tender notification for the procurement of
“Laser Based Dissection Microscope” for the Animal BSL-3 facility in
Centre for Infectious Diseases of the
Indian Institute of Science, Bangalore**

Last date of submission of tenders: 03.10.2022

(TENDER FROM DOMESTIC VENDORS)

Date: 12.09.2022

To whom it may concern

This is a Request for Quote (RFQ) from domestic (India-based) manufacturers or their Indian authorized distributor for the supply of “Laser Based Dissection Microscope” as a part of a tender for the Centre for Infectious Diseases Research at the Indian Institute of Science.

General Specification for Laser Based Dissection Microscope

General nature of the System	State of the Art, advanced Laser Micro dissection system for fully automated laser microdissection, separation and collection of samples. The System should be able to perform contact less sample collection for contamination free 100% sample purity. The system should also demonstrate gentle sample collection by means of natural gravitational force without applying any other additional laser based or physical force. Should collect samples directly into reaction buffer or culture media and pool unlimited amounts of specimen without any limiting factors of sizes and shapes. Should offer maximum flexibility of dissection devices for best and independent specimen preparation. Detect and dissect vast amounts of material quickly and reliable for brightfield as well as for fluorescence applications
Microscope stand	Fully automated upright microscope with Motorized Z with minimum 10 nm step increment for precise and accurate focussing. Microscope should have body mounted Touch screen to control all the motorized components of microscope.
Observation Tube	Trinocular tube with two eyepieces of min. 20 mm or higher field of view for Eyepiece and 16 mm or higher FOV for Camera.
Transmitted light	Digitally encoded Transmitted light continuously variable luminance Adjustment of brightness, with Field Diaphragms. Preferably LED for long life (approx. 20000 hrs or more). Should include inbuilt fast shutter of min 10ms or better.
Contrasting Methods	Microscope should be suitable for Bright field & Fluorescence.

XY Stage	Motorized XY stage with High precision, including dissection and collection units, Holder for slides with different size and holder for Petri dishes.
Objective nosepiece	Motorized 7 or more position nose piece for easy operation. Features must be high-grade smooth operation and with positive click stops.
Condenser	Motorized Condenser suitable for all transmitted light contrasting techniques with motorized turret of minimum 7 or more positions to accommodate various modules. Higher N.A. with 0.55 or more for clearer sample visualization and identification.
Collector Unit	Should have minimum 4 collection positions for 0.2ml and 0.5ml Standard PCR tubes, collector for 8 strip tubes and sample should be able to be collected in Membrane petri dish/IBIDI slides for live cell dissection. Sample collection should be with contact free mechanism without touching the slide or samples. It is also required to have natural sample collection by means of gravity and without applying any further laser or other physical force . Offer the collector for 8 cups strips up to 6 in total 48 cups.
Dissection Laser	DPSS pulsed laser of 355 nm , should be maintenance free, long life. The system must be equipped with high precision scanner to guide the laser beam movement for precise dissection. Should have incorporated laser device for aperture setting to adjust the laser diameter, power and speed depending upon the objective magnification and sample texture. Cutting and isolation of sample should be done with the same laser. Laser power/energy minimum of 70 μJ or better and pulse length of <4 ns or better. Cutting on glass slides without the need of special consumables should be possible. Auto alignment of the laser via software.
Fluorescence	Motorized Fluorescence Filter turret with minimum 5 or more positions . Motorized aperture and field diaphragms; Should have inbuilt motorized 4 / 5 position light intensity filter wheel / slider . 120W metal halide light source with minimum lamp life of 2000 hrs or better. Band pass filter cubes for DAPI / Hoechst, FITC / GFP and Rhodamine/Cy3/TRITC. Dissection should be possible simultaneously in Fluorescence while Imaging.
Objectives	Plan Fluorescence grade objectives 1.25x/0.04, 5x/0.12, 20x/0.40 Corr, 63x/0.70 Corr and 150x/0.9. All objectives should be with Long Working Distance, UV corrected and should be optimized for laser dissection.
CCD Camera	Digital high-sensitivity iCCD camera for both monochrome & colour applications. Sensor: 1/3" interline progressive scan CCD sensor, 1.2 Megapixel resolution. C-mount with 0.4x could be offered.
Monitor	21" Pen Monitor LCD Full HD incl. Pent o be provided.
Software	Software to control all the motorized components of microdissection system, above camera for acquisition of images in Multi-Channel Mode with Image Overlay, Time lapse, Z stacking. Modules to perform Automated Dissection of samples. Specimen Overview function for quick definition of the Specimen Overview area directly in the GUI. Should store Specimen positions marked in low objective retrieve same position in Higher magnification objectives. Automated detection and dissection of single cell.
Computer System	A branded computer system with Xenon Quad Core Processor @ 4.1GHz, 16GB DDR4 RAM, NVIDIA Quadro P400 with min 2 GB RAM, 2TB SATA HDD along with Keyboard and mouse.

Others	Microscope, Camera, Motorized XY stage, Laser setup for dissection and Control / Analysis software should be from same Manufacturer.
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WARRENTY AND OTHER SPECIFIC TERMS AND CONDITIONS

Warranty is one year from the date of installation or 13 months from the date of shipment, whichever is earlier.

Delivery will be made in 8-10 weeks after receipt of PO

The quotations should be on FOR-IISc Bangalore basis in INR only.

The quotations should be submitted in two bids system, i.e., technical bid, and commercial bid.

The technical bid must include all details of technical specifications of the instrument along with commercial terms and conditions masking only the price component. Bill of materials, brochures, technical datasheets, and any other document may be enclosed to help the evaluation of the technical bid. Please also include warranty terms and any other information on upgradation terms in the technical bid.

The commercial bid must include the price of the instrument in Indian currency indicating break up of: Installation, commissioning, and training charges, including any incidental expenses if any.

The price of every line item in the commercial bid should be quoted along with the total quoted price for the instrument to be operational (fixed and ready to use) in our facility.

Both the Technical and Commercial bid should be put in separate sealed envelopes, and put together in another cover stating, "Laser Based Dissection Microscope" and should reach us on or before 17:00 hours of 3rd October 2022

The vendor should have a good track record of having previously supplied at least 5 "Laser Based Dissection Microscope in India in the last two years (please furnish details)

The vendor should provide local content declaration in terms of percentage of material locally procured and imported as per the OM No P-45021/2/2017-PP(BE-II) dated 16 sep 2020.

The vendor should have a team of dedicated engineers for application and service support based out of Bangalore

The lead time for the delivery of the equipment should not be more than three months from the date of receipt of the purchase order

The validity period of the quotation should be 90 days

If the goods are found to be defective, they must be replaced or rectified at the cost of the supplier within 30 days from the date of receipt of written communication from us. If there is any delay in replacement or rectification, the warranty period should be correspondingly extended.

The purchaser reserves the right to accept or reject any bid and to annul the bidding process and reject all bids at any time period, without thereby incurring any liability of the affected bidder or bidders

Please submit the proposal to the following address: The Convenor, Centre for Infectious diseases Research, Indian Institute of Science, C. V. Raman Avenue, Bangalore 560012.
