national centre for biological sciences
tata institute of fundamental research

Ref: NCB/F-489/2016-2017 (N) **September 1 , 2016**

Addendum No:1

Ref. 1) : Tender Notice No: 009/2016-2017, 2): NCB/F-489/2016-2017 (N)

The following Addendum is issued to our Tender, under Reference No: **NCB/F-489/2016-2017 (N) to amend the following:**

Sl. No.	FOR	READ
1.	**Annexure A - Technical Specifications**	**Annexure A - Technical Specifications**
	<u>High Sensitive Spectral Imaging Microscope – Qty. 1 No.</u> **Motorized Inverted Fluorescence Microscope** Fully Motorized Inverted Fluorescence Microscope for BF/DIC/ Fluorescence Mechanical stage with Universal sample holders for slides, 35/60 mm Petri dish, multi well plate. Motorized 6 position DIC nosepiece, Universal Condenser 6 position fluorescence turret for accommodating fluorescent filters for sample visualization and camera based imaging. High precision Z-focus drive with step size of 15 nm or better High resolution confocal grade objectives of 10x, 20X, 40x, 60/63xand 100X immersion Band pass fluorescent filters for DAPI, 488, 568 and 647 Monochrome cooled CCD camera, *controlled by the same confocal software for multichannel, z stack, time lapse wide field imaging. LED/Halogen llumination for transmitted light & 120W metal halide illumination for Fluorescence should be offered. • **Spectral confocal imaging unit with built-in high sensitive detectors:** Laser point scanning and Confocal detection 3 channel spectral detectors for simultaneous detection of 3 fluorophores, and with at least 2 GaAsP detectors. All detectors should be capable of working in Intensity and Spectral mode Imaging. Fast scanner with real "ROI" scan capability, at least 16X16 resolution. Transmitted PMT for laser based DIC imaging **Laser module** Laser module for 488nm, 561nm, 640nm and 405nm. Laser-scan head connection through fiber optic cable AOTF or electronic modulation for fast laser switching and synchronization for real ROI scan for FRAP, photo activation/conversion experiments	**<u>High sensitive true-spectral imaging microscope with the following features: Qty. 1 No.</u>** **Note: Essential features are highlighted below. Please note that venders not satisfying the essential features will not be considered.** **Essential features:** **- Motorized stage, XY-scanning with tile-scan capability, and Universal sample holders for slides, 35/60 mm Petri dish, multi well plate.** **- 2 channel prism/diffraction-grating based spectral separation (TRUE-spectral detectors), for simultaneous detection of 2 fluorophores** **- At least 1 GaAsP detector. All detectors should be directly coupled, and not through optical fiber, and capable of working in Intensity and Spectral mode Imaging. Upgradability to more detectors and super resolution** • **Motorized Inverted Fluorescence Microscope** Fully Motorized Inverted Fluorescence Microscope for BF/DIC/ Fluorescence **- Motorized stage, XY-scanning with tile-scan capability, and Universal sample holders for slides, 35/60 mm Petri dish, multi well plate.** - Motorized DIC nosepiece and Universal Condenser - 6 position fluorescence turret for accommodating fluorescent filters for sample visualization and camera based imaging. - High precision Z-focus drive with minimum step size of 30 nm or better - High resolution confocal grade objectives of 10x, 20X, 40x-Air, 60/63x oil immersion, with Plan apochromatic for at least 40x and 63x and DIC on 40x - Band pass fluorescent filters for DAPI, 488, 568 and 647 - LED/Halogen llumination for transmitted light & 120W metal halide illumination for Fluorescence.

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Sl. No.	FOR	READ
	Annexure A - Technical Specifications	**Annexure A - Technical Specifications**
	Computer and imaging software Latest 64 bit control computer with Intel Xeon Processor, DDR RAM 8GB HDD: 1TB SATA upgradable to 2 TB or better, DVD, SuperMulti SATA +R/RW, Graphics: AT Fire GL V5200 256MB DH DVI, Gigabit Ethernet, Win 7 Ultimate 64 bit , USB 2.0, Fire wire. Large 24" LCD TFT monitor. 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. Saving of all system parameters with the image for repeatable/reproducible imaging. Line, curved line, frame, Z-stack, Time series imaging capabilities. Real ROI bleach for FRAP, Photo-activation/conversion experiments. FRAP, FRET imaging as well as Quantitative data analysis capability. Standard geometry Measurements like length, areas, angles etc including intensity measurements. Advanced 3D image reconstruction with rendering from a Z-stack image series. Co-localization and histogram analysis with individual parameters. Spectral un-mixing with fingerprinting for separation of overlapping excitation/emission spectra of fluorophores.	• **Spectral confocal imaging unit with built-in high sensitive detectors:** - Laser point scanning and Confocal detection - **2 channel prism/diffraction-grating based spectral separation (TRUE-spectral detectors), for simultaneous detection of 2 fluorophores** **- At least 1 GaAsP detector. All detectors should be directly coupled, and not through optical fiber, and capable of working in Intensity and Spectral mode Imaging. Upgradability to more detectors and super resolution** - Scanner should accommodate at least 5fps @ 512x512 resolution and real "ROI" scan capability. Transmitted PMT for laser based DIC imaging • **Laser module** - Laser module for 405nm, 488nm, 561/552nm, and 640/638nm. - AOTF or electronic modulation for fast laser switching and synchronization for real ROI scan for FRAP, photo activation/conversion experiments • **Computer and imaging software** - Latest 64 bit control computer with Intel Xeon Processor, 3.5GHz or better, atleast 8GB RAM HDD: atleast 2TB SATA or better, DVD, SuperMulti SATA +R/RW, Graphics: AT Fire GL V5200 256MB DH DVI, Gigabit Ethernet, Win 7 Ultimate 64 bit , USB 2.0, Fire wire. More than 27" LCD monitor. - Software should be capable of controlling Motorized components of microscope, digital camera, confocal scan head, laser control including AOTF and Image acquisition & processing for confocal and super resolution imaging. - Saving of all system parameters with the image for repeatable/reproducible imaging. - Line, curved line, frame, Z-stack, Time series imaging capabilities. - Real ROI bleach for FRAP, Photo-activation/conversion experiments. - FRAP, FRET imaging as well as Quantitative data analysis capability. - Standard geometry Measurements like length, areas, angles etc including intensity measurements. - Advanced 3D image reconstruction with rendering from a Z-stack image series. - Co-localization and histogram analysis with individual parameters. - Spectral un-mixing with fingerprinting for separation of overlapping excitation/emission spectra of fluorophores.

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Sl. No.	FOR	READ
2.	**COST OF TENDER: Approx. Rs.75,00,000/-**	**COST OF TENDER: Approx. Rs.90,00,000/-**
3.	**EMD: Rs.1,50,000/-**	**EMD: Rs.1,80,000/-**
4.	**Last Date for Sale of Documents: 23/08/2016 till 16.00hrs** **Last date for submission : 24/08/2016 till 14.00hrs** **Due date for opening bids : 24/08/2016 till 14.30hrs**	**Last Date for Sale of Documents: 15/09/2016 till 16.00hrs** **Last date for submission : 16/09/2016 till 14.00hrs** **Due date for opening bids : 16/09/2016 till 14.30hrs**

- End of Addendum -

All other terms and conditions of the Tender Documents remain unaltered. Please return the **Addendum No:1 dt.01/09/2016** with your signature, date & stamp and should be enclosed in the **sealed cover.**

The Addendum-1 is available in our Web site - http://www.ncbs.res.in/information/tenders.html and also available in Central Public Procurement Portal, http://eprocure.gov.in/cppp.

Thanking you,

Yours faithfully,
For and on behalf of
National Centre for Biological Sciences,

Head-Purchase

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