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 ICMR-NATIONAL INSTITUTE FOR RESEARCH IN ENVIRONMENTAL HEALTH
 भारतीय आयुर्विज्ञान अनुसंधान परिषद
 INDIAN COUNCIL OF MEDICAL RESEARCH
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CORRIGENDUM NOTICE

TENDER No. NIREH/BPL/PUR/2018-19/7

1. Fluorescence Microscope

Specifications	Requirement	
	Existing	Revised
Imaging Ports	Fully motorized light path distribution - camera port 100%, eyepiece 100% and 50%:50% for simultaneous observation and imaging. Should be controlled through touch screen controller.	Fully motorized light path distribution - camera port 100%, eyepiece 100% and 50%:50% or 20%:80% for simultaneous observation and imaging. Should be controlled through touch screen controller.
Objectives	The following objectives should be quoted:	The following objectives should be quoted:
	<input type="checkbox"/> Plan Fluorite/SemiApochromat/Neofluor 10X/0.3 Phase,	<input type="checkbox"/> Plan Fluorite/SemiApochromat/Neofluor 10X/0.3 Phase,
	<input type="checkbox"/> LWD Plan Fluorite/SemiApochromat/ Neofluor 20X/0.45 Phase, W.D. 6.9–7.8 mm	<input type="checkbox"/> LWD Plan Fluorite/SemiApochromat/ Neofluor 20X/ 0.40 Phase, W.D. 6.9–7.8 mm
	<input type="checkbox"/> LWD Plan Fluorite/SemiApochromat/Neofluor 40X/0.60, W.D. 2.8 – 3.6 mm	<input type="checkbox"/> LWD Plan Fluorite/SemiApochromat/Neofluor 40X/0.60, W.D. 2.8 – 3.6 mm
	<input type="checkbox"/> Plan Apochromat 60X/63X/1.35 oil, spring loaded	<input type="checkbox"/> Plan Apochromat 60X/63X/ 1.4 oil, spring loaded
	<input type="checkbox"/> Plan Apochromat 100X/1.4 Oil, spring loaded	<input type="checkbox"/> Plan Apochromat 100X/1.4 Oil, spring loaded
	DIC accessories for 40X & 60X/63X objectives should be a standard part of the quote.	DIC accessories for 40X & 60X/63X objectives should be a standard part of the quote.
Image Splitter	Dual view image splitter for emission splitting system to acquire 2 spatially identical but spectrally distinct images simultaneously with dichroic sets/cubes for green-red emission	Dual view image splitter for emission splitting system to acquire 2 spatially identical but spectrally distinct images simultaneously with dichroic sets/cubes OR external/ internal

	and cyan-yellow emission suitable for single molecule FRET (Fluorescence Resonance Energy Transfer) applications.	high speed filter wheel with minimum switching time of ≤ 28 ms for green-red emission and cyan-yellow emission suitable for single molecule FRET (Fluorescence Resonance Energy Transfer) applications.
Color camera	Color CMOS (at least 16MP)/cooled CCD (at least 3.0MP), 15fps at full resolution and 55-75 fps with binning, USB3.0 interface. Should be able to work in full HD mode as well.	Color CMOS (at least 16MP)/cooled CCD (at least 3.0MP), 6-15 fps at full resolution and 45-75 fps with binning (for CMOS camera), USB3.0 interface. Should be able to work in full HD mode as well.
Software	The imaging software should be able to control all the functions of the camera(s) and the motorised microscope. It should be capable of performing multidimensional (XYZt λ) image acquisition, FRET analysis, time-lapse at specified interval, colocalization, High Dynamic Range (HDR) imaging, region and line measurement, etc. Basic deconvolution and online deblur/deconvolution module, and intensity measurement modules should be quoted as standard. The software should be able to do Extended Focal Imaging/Extended Depth of Focus imaging. It should have capability to separate spectrally overlapping dyes and auto-fluorescence.	The imaging software should be able to control all the functions of the camera(s) and the motorised microscope. It should be capable of performing multidimensional (XYZt λ) image acquisition, FRET analysis, time-lapse at specified interval, colocalization, High Dynamic Range (HDR) imaging, region and line measurement, etc. Basic deconvolution and preferably online deblur/deconvolution module, and intensity measurement modules should be quoted as standard. The software should be able to do Extended Focal Imaging/Extended Depth of Focus imaging. It should have capability to separate spectrally overlapping dyes and auto-fluorescence.

Beside, the term “Encoded Motorized XY stage” in the specification column should be read as “Motorized XY stage”.

2. Aerosol/Mass Monitor/Dust Track (Range PM1, PM2.5, PM4, PM10) in ambient air

Specifications	Requirement	
	Existing	Revised
System description	Ambient air/Aerosol real-time monitor capable of monitoring/analyzing ambient air concentration of Total PM, PM1, PM2.5, PM4 and PM10	Ambient air/Aerosol real-time monitor capable of simultaneously monitoring/analyzing ambient air concentration of Total PM, PM1, PM2.5, PM4 and PM10

Other features	System should have the capacity to store at least 50,000 data points or at least 30 days data at 1minute logging interval.	System should have the capacity to store at least 50,000 data points or at least 30 days data at 1minute logging interval.
	Measurement should be fully automatic and all-weather 24/7 outdoor monitoring must be supported	Measurement should be fully automatic and all-weather 24/7 outdoor monitoring must be supported
	Should be supplied with an environmental enclosure for outdoor operations	Should be supplied with an environmental enclosure for outdoor operations
	Should be supplied with a Windows 10 compatible software	Should be supplied with a Windows 10 compatible software
	Manual and programmable data logging options	Manual and programmable data logging options
	Onsite training to users must be provided	Onsite training to users must be provided
	Should be CE/ISO or Indian equivalent standard certified	Should be CE/ISO or Indian equivalent standard certified
		Should offer filter holder (optional)

3. Portable Multigas Analyzer for common air pollutants (SO₂, NO, NO₂, O₂, CO, H₂S)

Specifications	Requirement	
	Existing	Revised
System description	Portable Analyzer to monitor air concentration of common air pollutants viz. SO ₂ , NO, NO ₂ , O ₂ , CO, H ₂ S etc.	Portable Analyzer to simultaneously monitor air concentration of common air pollutants viz. SO ₂ , NO, NO ₂ , O ₂ , CO, H ₂ S etc.

4. FPLC Purification System

Specifications	Requirement	
	Existing	Revised
General description	Liquid chromatography protein purification system, designed for fast and secure purification method development, to be equipped with unicorn software with optional feature of design of experiment and CFR 21 compliance.	Liquid chromatography protein purification system, designed for fast and secure purification method development, to be equipped with compatible software with optional feature of design of experiment and CFR 21 compliance.
Pump and flow rate	Two pump system with a selectable flow rate of 0.001 ml/min to 20 ml/min or more. Pressure range of 0 to 18 MPa or more.	Two pump system with a selectable flow rate of 0.001 ml/min to 20 ml/min or more. Pressure range of 0 to 10 MPa or more.

	<p>System should be able to provide reproducible isocratic or gradient elution.</p> <p>System should have a dedicated Sample pump with dual piston 0-10 Mpa or more for automatic sample loading. Pump purging and air removal should also be performed automatically.</p>	<p>System should be able to provide reproducible isocratic or gradient elution.</p> <p>System should have a dedicated Sample pump with dual piston 0-10 Mpa or more for automatic sample loading. Pump purging and air removal should also be performed automatically.</p>
Detectors	<p>System UV detector should have an absorbance range at least -5 to +5 AU crucial for sharp peaks. Feature is required when samples which give reading in the negative spectra of the absorbance or concentrated sample getting UV saturated.</p> <p>Detector for UV (wavelength- 260/280 nm), Conductivity (range: 1 mS/cm – 950 mS/cm) and pH measurement (range: 0-14 pH).</p> <p>Requires optional pH valve and electrode.</p>	<p>System UV detector should have an absorbance range at least 0 to 3 AU crucial for sharp peaks. Feature is required when samples which give reading in the negative spectra of the absorbance or concentrated sample getting UV saturated.</p> <p>Detectors for UV/ visible (wavelength - 200-700 nm), Conductivity (range: 1 mS/cm – 950 mS/cm) and pH measurement (range: 0-14 pH).</p> <p>Requires optional pH valve and electrode.</p>
System control and computer specification	<p>System Control & chromatographic analysis: Unicorn based software with optional design of experiment, Column log book and FDA 21 CFR Part II compliant and confirm of GLP and GMP norms.</p> <p>Computer hardware & software requirement: The system should be provided with computer for instrument control and data collection, and with appropriate software for standard chromatographic procedures</p>	<p>System Control & chromatographic analysis: software with optional design of experiment, log book for column usage and preferably FDA 21 CFR Part II compliant and confirm of GLP and GMP norms.</p> <p>Computer hardware & software requirement: The system should be provided with computer for instrument control and data collection, and with appropriate software for standard chromatographic procedures.</p> <p>Computer Specification: System Should be supplied with a (i) Compatible Desktop: Windows 10 Home 64, Intel Core i7-6700T with Intel HD graphics 530 (2.8 Ghz, upto 3.6 Ghz, 8 MB cache, 4 cores), 16 GB DDR3L (2 x 8 GB), 2 TB 7200 rpm SATA, Ultra Slim-</p>

		tray super multi DVD burner, 27 inch LED display monitor (1 no), integrated 10/100/1000 Gigabit Ethernet LAN; 802.11b/g/n (1x1) and Bluetooth 4.0 combo, 4 USB 2.0; 2 USB 3.0, 1, Keyboard with volume control, optical mouse, pre-loaded all essential PC software; (ii) laser printer with spare cartridges
Columns	Pre-packed Gel Filtration column, 120 ml bed volume. IEX prepacked Column kit.	Pre-packed Gel Filtration column, 120 ml bed volume and IEX prepacked Column kit from the same manufacturer or from a standard manufacturer.
Essential Accessories		Branded UPS with 45 min backup.

5. UV-Vis gel imaging system

Specifications	Requirement	
	Existing	Revised
System description	Vertical gel imaging system for 1–4 gels with power pack, semi-dry blotting system and full-feature imaging system.	Full-feature imaging system.
Camera	Camera should be CMOS scientific grade/CCD sensor with auto-exposure.	Camera should be CMOS scientific grade/CCD, sensor with auto-exposure.
	Should have pre-focused at least 5 mega pixel camera.	Should have pre-focused at least 4 MP.
	Pixel density should be RAW 8 bit/10 bit/12bit.	Pixel density should be RAW 12bit/ 16 bit.
	Camera should have 6 mm focal length.	Camera should have 6 mm focal length.
	Lens should have F1.2 aperture size, with manual adjustment.	Lens should have F1.2 aperture size, with manual/ automatic adjustment.
Darkroom	The darkroom should have 6x1W white lamps module.	The darkroom should have facility for white light illumination.
	Should have safety device that shuts off UV lights when the door opens.	Should have safety device that shuts off UV lights when the door opens.

6. Gradient PCR

Specifications	Requirement	
	Existing	Revised
Gradient	Capable of testing 5 different temperatures simultaneously	Capable of testing 5 or more different temperatures

	across a gradient range of ≤ 5 °C between adjacent zones with minimum 0.1°C increment in gradient	simultaneously across a gradient range
Sample ramp rate	± 3.35 °C/sec	Deleted
Gradient (block) range	25 °C (5 °C Zone-to-Zone)	1 - 25 °C

7. Western blot apparatus with HC power pack, transfer unit and imaging system

Specifications	Requirement	
	Existing	Revised
Detector	Cooled CCD ≥ 5 MP or more , pixels 3380 x 2704 pixel array or more	Cooled CCD ≥ 6 MP or more
Data out put	8 Bit or higher. G2I, SCN, TIFF , JPEG files	8 Bit or higher. TIFF , JPEG files, etc
Essential Accessories		Compatible PC with the following specifications:-System Should be supplied with a (i) Compatible Desktop: Windows 10 Home 64, Intel Core i7-6700T with Intel HD graphics 530 (2.8 Ghz, upto 3.6 Ghz, 8 MB cache, 4 cores), 16 GB DDR3L (2 x 8 GB), 2 TB 7200 rpm SATA, Ultra Slim-tray super multi DVD burner, 27 inch LED display monitor (1 nos), integrated 10/100/1000 Gigabit Ethernet LAN; 802.11b/g/n (1x1) and Bluetooth 4.0 combo, 4 USB 2.0; 2 USB 3.0, 1, Keyboard with volume control, optical mouse, pre-loaded all essential PC software; (ii) laser printer with spare cartridges Branded online UPS with 30 min backup.

All other terms and conditions mentioned in the Tender remain unchanged.

Note: All subsequent corrigendum / amendment, if any, shall be published only on NIREH website.

Director
ICMR-NIREH, Bhopal