Global Tender Notification for procuring “Chemiluminescene and Fluorescence Doc Imaging System" at the Biochemistry Department, Indian Institute of Science, Bangalore

Dear Sir/Madam, September 12, 2022

Sub: Chemiluminescene and Fluorescence Doc Imaging System

This is a global tender notification meant for the purchase of a "Chemiluminescene and Fluorescence Doc Imaging System" towards the purpose of Visualizing the DNA, Protein gels, Fluorescent and chemiluminescence western blotting methods (see the specifications below). Your quotation should clearly indicate the terms and conditions of the quotation, delivery schedule, entry tax, payment terms, warranty coverage etc. The quotation should be submitted in two parts: **Part I (Technical Bid) and Part II (Commercial Bid)** and both should be submitted in separate sealed envelopes. The Technical bid should be exactly the same as the Commercial bid except that prices must not be shown in the technical bid. The Technical bid should have an item-wise compliance report of all specifications indicated below. **Prices quoted for equipment should be in USD and inclusive of all taxes as well as charges FOB, CIF, CIP, FCA, DAP, Letter of credit and customs duty up to Bangalore**. **The last day for submitting the bid is 27th Sept. 2022 from the date of tender notification.** The offer should be valid for a period of at least 90 days from the last date of submission of quotes.

The bid should address the following technical specifications for the : Chemiluminescene and Fluorescence Doc Imaging System, accessories and controlling software:

1. System should be capable of detection and quantification of Chemiluminescence, fluorescence and IR-Fluorescence signals from blots/gels/membranes using supercooled CCD based direct imaging.
2. **System should also be able to perform quantitative chemiluminescence imaging of 96-well plates without any artifacts.**
3. There should be an inbuilt touchscreen-based display of at least 10 inches size to control the system with user friendly interface.
4. System should have **Epi-White light source 470 to 656 nm, Epi-UV 360nm Epi-blue: 460 nm, Epi-green: 535 nm, Epi-red: 635 nm, Epi-IR short: 660 nm and Epi-IR long: 775 nm**
5. **The filter wheel of the system should have at least 7 filter positions for fluorescence imaging and one blank position for chemiluminescence imaging.**
6. **System should be supplied with following five emission filters: Cy2: 525BP20, Cy3 (UV): 605BP40, Cy5: 705BP40, IR short: 715BP30, IR long: 836BP46**
7. **System should accept third party custom filters with user provision to access and replace filters easily.**
8. **System should have binning options ranging from 1x1, 2x2, 3x3, 4x4, 5x5, 8x8, 16x16.**

9. The system should have a large aperture lens with **F-value of 0.74 or lesser.**
10. **The Lens material should allow at least two times higher transmittance of light particularly in the chemiluminescence wavelength range around 420 nm.**
11. Detection system should have supercooled CCD camera up to **-25 °C with automatic focus and exposure**
12. At least 8 megapixels CCD chip is required for high resolution images.
13. **Field of View**: Maximum **imaging area** should be at least **16x20 cm.**
14. **System should have at least two sample positions, to keep samples very near as well as far from the CCD camera.**
15. System should generate **16-bit images with dynamic range of 4.8** or more.
16. Image capturing modes should be **Automatic, Automatic with pre capture, Manual, Time series with cumulative option.**
17. **System should have inbuilt Signal-Noise optimization watch to be able to detect more weak bands without saturating other bands in the blot.**
18. **The control window should show continuous image updates and the progression of signal-to-noise ratio improvement for your selected region of interest on the blot.**
19. Exposure time for chemiluminescence and fluorescence modes should be from **1/100 seconds to 10 Hours or more.**
20. System should have **automatic dark frame correction, flat frame correction, distortion correction and blue shift correction.**
21. System should have one integrated software for chemiluminescence, fluorescence imaging and densitometric analysis.
22. System should be quoted with 1 year of comprehensive warranty.

Important: Please note that the : Chemiluminescene and Fluorescence Doc Imaging System should match all technical specifications and item- wise compliance must be listed in a detailed document in the technical bid

The sealed tender documents should be addressed to <u>The Chair, Department of Biochemistry, Indian Institute of Science, Bangalore 560 012. Last date for receiving queries is 27th Sept. 2022 from the date of tender notification.</u>

Thank you,

Sincerely

Chair
Department of Biochemistry,
Indian Institute of Science
Bangalore - 560 012