national centre for biological sciences tata institute of fundamental research



Date: January 7, 2020

## Specification for Gel-documentation system

- 1. The System should be able to image fluorescent DNA, RNA and protein gels, colorimetric gels & blots and colony arrays.
- 2. The system should have Peltier cooled CCD camera
- **3.** The system should have High resolution scientific grade CCD camera minimum 7 mega pixel resolution or more with minimum 1400x1024 pixel array with data acquisitions.
- 4. System should have light tight cabinet to provide increased sensitivity to minimize background noise.
- 5. System should have sample tray should extend out as a drawer, enabling the user to perform band excision.
- 6. The system should have different mode of operation (standard/programmed)
- 7. The system should have 16-bit grey scales
- 8. The system should have Motorized control for Zoom with numerical feedback and software acquisition preset integrated into an intuitive and easy to use interface along with gel alignment templates, aperture & Iris with broad range amber filter and suitable lens.
- 9. System should have different EPI light illuminations integrated in a light tight darkroom with software controlled illumination to view DNA gels using blue excitable DNA fluorescent stains such as Gel screen, SYBR safe dyes and SYBR Green
- 10. The system should have UV and white light source. UV illumination source should be 302 nm with minimum 25cm X 25cm Trans- illumination area.
- 11. The system should have GFP, SYBR Green, and Ethidium bromide filter.
- 12. The system should have option for automatic and manual exposure.
- 13. The system should have adjustable manual exposure time.
- 14. The system should have auto and manual focusing
- 15. The system should have brightness control.
- 16. The system should have UV safety shut off door system.
- 17. The system should be supplied with the analysis software.
- 18. The system should have option for 3D imaging.
- **19.** The system should have LCD touch screen display.
- 20. The system should be supplied with suitable PC required for image analysis.
- 21. The system should have USB port for data logging
- 22. The system should be able to operate at 230 V /50 Hz
- 23. The system should be CE/ ISO certified
- 24. The system should have the warranty for 3 years.
- 25. The system should be supplied with all accessories required to function.
- 26. The system should be installed by the trained Engineer and users should be trained on Application, operation and maintenance.
- 27. The product should be as per CE/IEC guideline and certificate from authorized body should be submitted. No self-declaration will be accepted.
- **28.** Compliance to each of the above points should be separately indicated and evidence presence for each of them (Product brochures should be highlighted wherever required).

- 29. The service team should be in Bangalore. Contact details of Engineer should be submitted with this offer.
- **30.** The past performance/service support in NCBS/instem/ccamp should be satisfactory and the technical evaluation will be done accordingly.