**Local Tender Notification from Indian Original Equipment Manufacturer (OEM) or their Indian authorized distributor for procuring "Multi-Mode Microplate Reader" at the Molecular Biophysics Unit, Indian Institute of Science, Bangalore**

Dear Sir/Madam, November 8, 2021

**Sub: Multi-Mode Microplate Reader**

**This is a local tender notification from Indian Original Equipment Manufacturer (OEM) or their Indian authorized distributor meant for the purchase of a "Multi-Mode Microplate Reader"** towards the purpose to detect absorbance, luminescence, and fluorescence from solution samples in microplates. 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 vendor should demonstrate the manufacture of the product within India. 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 should be inclusive of all taxes and duties and should be inclusive of delivery of the items to the site and installation. Prices must be in INR and should include the appropriate GST. The last day for submitting the bid is November 24, 2021. The offer should be valid for a period of at least 60 days from the last date of submission of quotes.

The bid should address the following specifications for the **Multi-Mode Microplate Reader**:

**Important: Please note that the Multi-Mode Microplate Reader should match all specifications listed below and shown to be manufactured within the country.**

- A Multimode Reader with following Detection Chemistries in Monochromator Mode (no filters required) - UV-VIS Absorbance, Fluorescence Intensity (Top and Bottom)**,** Luminescence. The same system should be field upgradable to Dual Injectors for Flash Luminescence.
- Band width for Absorbance - 4.0 nm.
- System should use aXenon Flash lamp as the excitation light source
- System should have PMT for Fluorescence & Luminescence and Silicon Diode for Absorbance. Preferably Ultra cooled PMT upto - 5°C for Fluorescence and Luminescence.
- System should offer path length correction to automatically normalize well absorbance equal to 1cm path length of a cuvette for spectrophotometric datas.
- Well Scanning in all modes should be possible.
- System should offerprogrammable shaking with linear and orbital microplate shaking methods.
- System should offer temperature control in the microplate chamber from 5°C above ambient to 65 °C.
- System should offer ability to read 6 to384 well plates.
- System should perform Spectral Scanning, Kinetic Reading and End-point reading.

- The system should have preferably built-in near-field communication (NFC) functionality or equivalent in the reader enabling users to pull up custom protocols with a single tap.
- **Absorbance photometric performance :**
  a) Wave length range – 230- 1000 nm
  b) Wavelength Selection: Monochromator, tunable in 1.0 nm increments.
  c) Dynamic Range: 0-4 Abs or better.
- **Fluorescence Performance :**
  a) Reading Capabilities: Top & bottom of a Microplate
  b) Wavelength Range: 250 – 850 nm
  c) Wavelength Selection: Monochromator, tunable in 1.0 nm increments.
  d) Dynamic range> 6 logs
  e) Sensitivity – Top Read - 96 wells1 pM fluorescein , Bottom Read – 96 wells 2 pM fluorescein.
- **Luminescence Performance :**
  a) Flexibility to select Glow Luminescence mode
  b) Wavelength range: 300 – 850 nm
  c) Wavelength Selection: Monochromator.
  d) Dynamic range> 7 decades.
  e) Sensitivity – ( ATP Glow ) - 96 wells 2 pM
- The system should be supplied with data acquisition and analysis software.
- The system should have inbuilt Touch screen to run protocols without the need of a separate computer.

The documents may be addressed to the Chairman, Molecular Biophysics Unit (Kind attention: Prof. Raghavan Varadarajan), Indian Institute of Science, Bangalore 560 012. Last date for receiving queries is November 24, 2021. Please email varadar@iisc.ac.in. The last date and time for submission of bids is 5pm, November 24, 2021.

Thanking You,
Sincerely
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