

DIVISION OF GENETICS  
ICAR-INDIAN AGRICULTURAL RESEARCH INSTITUTE NEW DELHI-110012

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Dated: 26/12/23

E-PROCUREMENT THROUGH GEM TENDER NOTICE

On behalf of Secretary, ICAR/Director, ICAR-IARI, PD/Head/In—Charge, Division of Genetics invites online e-tenders through Gem Portal under custom bid system for purchase of the Multimode Microplate reader 01 Nos. DIVISION OF GENETICS , I.A.R.I., NEW DELHI-110012 , if necessary as per requirement in the interest of ICAR-IARI, subject to satisfactory performance of the Vendor and its willingness to continue on existing terms and conditions, as per requirements.

1. Tender Schedule:

Tender No.	Gem/2023/B/4386096
Date of release of tender through Gem portal	22/12/2023
Bid submission start date & time	22/12/2023 3:00PM
Last date & time for submission of bid	12/01/2024 3:00 P.M
Date & time for opening of technical bid	12/01/2024 3:30 PM
Cost of EMD value (in Rupees)	150000/-
Address for Communication	Asstt.Admn.Officer, Division of Genetics, IARI, Pusa, New Delhi.12

Revised.

## Multimode Microplate Reader

### Technical Specifications

- The instrument should have monochromator-based absorbance for wavelength flexibility, Filter-based fluorescence for excellent sensitivity and upgradable to Time-resolved fluorescence.
- Double monochromators for photometric (UV and Vis) measurements
- All specifications of the system should be tested and guaranteed by the factory. The specification should not be typical performance values or relative values.

### Plate Format:

- Instrument should read 6-384 well plate formats, with or without lids for fluorescence intensity, luminescence.
- Able to measure all detection technologies in single well i.e. photometry and fluorescence in same well.
- In built incubation and plate shaking option should be provided.

### Fluorescence/Fluorometry:

- Fluorometry: Wavelength range 200-850 nm.
- Fluorescence intensity sensitivity Top and Bottom: Fluorescein 5 pM (1 fmol/well, 96-well plate) fluorescein with 384 well back plate and top reading.
- Monochromator Bandwidth 2.4 nm.

*Haritha*  
डा. हरित बोल्लिनेडि / Dr. Haritha Bollinedi



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### **Absorbance / Photometry:**

- Measurement range in Photometry: 200-1000nm
- Linear measurement range in photometry:  
Dynamic Range 0-4 OD and OD linearity.
- Instrument should have on-board pathlength correction for direct quantification.  
e.g., Nucleic acids and proteins.

### **Computer System for data processing**

- Branded PC (HP/DELL), Intel Processor, dual core, speed >3.0 GHz.
- Operating System: Microsoft® Windows 10 Professional, 64 Bit.
- Memory: 8GB, DDR.
- Keyboard: 104 Key, USB Interface
- Mouse: Optical Mouse, USB Interface
- Video Card: Integrated card with min resolution 1440\*900 Resolution
- Monitor: LCD, 19inch, 6:9 wide screen, min 1440\*900
- Hard Drive: 250GB and above, SATA Interface
- Optical Drive: 16X DVD RW, SATA Interface
- Network Interface: 10/100 Base-T with RJ45 Socket- 2 Nos.
- Colour Laser Printer any make with USB interface.

### **Safety Features:**

- Orbital Shaking with adjustable timing, speed and diameter. Automatic safety control based on the shaking speed and plate format to avoid spilling of the liquid from wells.
- Database based software to run backups of all data, restore back up data (in case of hardware failure of original computer).
- No loss of already measured data even in case of power failure.
- Option for on-board dispensers, dispensing volume should be 1µl to 10,000 µl with 1 µl increments. Automatic safety control based on maximum well volume.

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## Data Analysis Software:


- Analysis software should be supplied with the instrument and has maximum 5 user system license.
- Software should have Inbuilt calculations, such as Blank Subtraction, Quantitative Curve Fit, Qualitative Classification, Spectral Analysis and Kinetic Calculations, as well as a comprehensive reporting tool.
- Both measured and calculated data can also easily be exported to other systems like Microsoft Excel for further data handling.
- User should able to load the software in to maximum 5 computer systems for data analysis.
- Software should have option for area selection. i.e. different protocols at different area of the same plate.
- Database based software to run backups of all data, restore back up data (in case of hardware failure of original computer).
- Spectral scanning of all 96 samples or 384 samples should be able to view in graph plot.

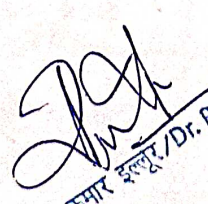
  
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