

पादप कार्यिकी संभाग DIVISION OF PLANT PHYSIOLOGY भा.कृ.अ.प.—भारतीय कृषि अनुसंधान संस्थान ICAR-Indian Agricultural Research Institute नई दिल्ली—110012 (भारत) NEW DELHI - 110 012 (INDIA)



File No.21-9/AIC/MMMR/24-25/SFC

Dated: 14-01-2025

NOTICE FOR E-PROCUREMENT THROUGH GeM

Online GeM e- bid are invited from reputed Manufacturere/Supplier/Authorized dealer in two bid system (Technical and Financial) for purchase of scientific equipment **Multi-mode Microplate Reader with Accessories, Qty. 01 No.** for **Agricultural Innovation Centre** on behalf of Director, ICAR-Indian Agricultural Reearch Institute, New Delhi. Please visit <u>www.iari.res.in</u> for_details Rules and Regulation and log in <u>www.gem.gov.in</u> for online e-bidding.

Details of Gem Bid is/are as mentined below:

GeM Bid No.	GEM/2025/B/5816958
Bid Submission start date and time	14-01-2025
Last Date & Time for submission of bid	04-02-2025 15.00
Date & Time for opening of Technical Bid	04-02-2025 15.30

Sd/-Asstt.Admn.Officer

Specifications for "Multi-mode Microplate reader with accessories"

1. Multimode Microplate Reader should be capable of measuring Fluorescence Intensity, Absorbance and Luminescence.

2. Absorbance (Spectrometer)

- **A.** Plate types should be 6 to 384-well plates or better.
- **B.** Wavelength range should be 200–600 nm or better.
- C. Light source should be Xeon flash lamp
- D. Read out range/ Measurement range should be 0–6 Abs/0-4.00OD.
- **E.** Accuracy should be in between $\pm 2\%$ or lesser which will be valid for all plate formats.

3. Luminescence

- A. Plate types should be 6 to 384-well plates or better.
- B. Wavelength selection should be direct or filters (for spectral scanning with monochromators).
- C. Wavelength range should be in between 350–650 nm or better.

4. Time-resolved fluorescence

- A. Wavelength range should be 250nm -700nm or better.
- B. Wavelength selection should be filters for top only (and spectral scanning with monochromators).
- C. Excitation wavelength range should be 200–700 nm or better.
- D. Emission wavelength range should be in between 400 -700 nm or better.
- E. The light source should be Xenon flash lamp.

5. Fluorescence intensity

- A. It should have double excitation and emission monochromators
- B. Excitation wavelength should be in between 200 700 nm or better.
- C. Emission wavelength range should be 270- 800 nm or better.

6. Incubator and Shaker

- A. It should have an incubator with temperature range of from ambient +4°C to 45° C.
- B. Shaking type should be orbital

7. It should have integrated gas module with controller that can control the CO2 concentration and make it stable.

- 8. It should have measurement mode Endpoint/kinetic, spectral scanning.
- 9. Multi-mode Microplate reader should have a PC controlled software.

10. Dispensing

- A. Plate types should be 6 to 384-well plates or better.
- B. It should have dispensers up to one or more syringe dispensers.
- C. Dispensing volume should be 5-1000 μ L or better.
- D. Precision should be $< 1\mu$ l with 50μ l, $< 0.25\mu$ l with 5μ l or better.