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|  <p>भा.कृ.अ.प.<br/>ICAR</p> | <p>पादप कार्यिकी संभाग<br/>DIVISION OF PLANT PHYSIOLOGY<br/>भा.कृ.अ.प.—भारतीय कृषि अनुसंधान संस्थान<br/>ICAR-Indian Agricultural Research Institute<br/>नई दिल्ली—110012 (भारत)<br/>NEW DELHI - 110 012 (INDIA)</p> |  <p>भारतीय कृषि अनुसंधान संस्थान<br/>IARI 1996</p> |
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File No.21-11/AIC/FM/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 **Fluorescence Microscope, Qty. 01 No.** for **Agricultural Innovation Centre** on behalf of Director, ICAR-Indian Agricultural Research Institute, New Delhi. Please visit [www.iari.res.in](http://www.iari.res.in) for details Rules and Regulation and log in [www.gem.gov.in](http://www.gem.gov.in) for online e-bidding.

Details of Gem Bid is/are as mentined below:

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| GeM Bid No.                              | <b>GEM/2025/B/5816975</b> |
| 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 FLUORESCENCE MICROSCOPE**

### **Technical Specifications :**

1. **Optical system-** Infinity Optical System or better.
2. **Upright Microscope.**
3. **Illumination-** Must have High luminescent White LED Illuminator with Light Intensity Management (LIM) feature, ECO mode and Sleep mode/Energy Saving or similar.
4. **Eyepieces** – FOV (Field of View-mm), 10X (22) or better.
5. **Focus-** Must have Coaxial Coarse/Fine focusing.
6. **Nosepieces-** Must have sextuple nosepiece (with Analyzer slot) or better.
7. **Condensor-** Condenser for bright field and phase contrast application.
8. **Stages-** Must have Cross travel, with vernier calibrations, stage handle height and torque adjustable for all stages.
9. **Observation methods-** Must allow Brightfield, fluorescence, Phase contrast.
10. **Objectives :**
  1. Plan Semi Apochromat 10X Phase NA 0.3 or better
  2. Plan Semi Apochromat 20X Phase NA 0.5- or better
  3. Plan Semi Apochromat 40X Phase NA 0.75 or better
  4. Plan Semi Apochromat 100X Phase NA 1.3 or better
11. **fluorescence attachment-** Must have fluorescence Attachment (5-6 position and Fluorescence filter cube Position) with LED Illumination system 20000 hours life.
12. **Camera :** CMOS Colour Camera, resolution of 5-7 MP or better Megapixel Camera for Bright field and Fluorescence Imaging.
13. **Image Analysis Software:** The software should be capable of Image capturing & Image Analysis. Time-Lapse Imaging, Z-Stack, Multi-point, Annotations, Binary layers, Snapshot, Movie, Tilting view (Montage), Multi-Channel, 2D/3D Large Image Stitching, Macro, Report Generation, Auto Measurement, ROI, Segmentation, Pixel Classifier, Multi-dimensional Image Viewer, Max/Min Projections.

### **General Specifications :**

1. Band pass filter for DAPI, FITC and TRITC.
2. The software should be capable of analyzing the image captured by the camera attached to the microscope and dedicated to Licensed software (no free software that comes with camera will be acceptable) with a key or CD of the manufacturer.
3. Computer: The firm should supply a desktop computer with the following specifications or better: Intel iCore i3/i5, 8GB RAM, 500GB HDD, 24" LED/TFT screen, OS-WIN OS 10(pro) or 11(pro), mouse, keyboard.
4. Warranty: At least 2-year comprehensive warranty from the date of installation.
5. The price should include all taxes & duties, delivery & installation.
6. The model with accessories quoted should be available on original equipment manufacturers (OEM) website.
7. The vendor should provide an ISO & BSI certificate issued by the OEM.
8. The microscope, camera & software should be from same manufacturer.