



DIVISION OF MICROBIOLOGY
ICAR- INDIAN AGRICULTURAL RESEARCH INSTITUTE
Pusa, New Delhi - 110 012



F. No. ICAR-IARI/Microscope with camera and software/23-24/Micro

Dated: 06/11/2023

BOO GeM Bidding

On behalf of Secretary, ICAR-IARI, Indian Agricultural Research Institute (IARI), **Division of Microbiology, IARI** invites online e-tender through GeM (BOQ), two bid system for Supply, commissioning and installation of "**Microscope with camera and software (Qty. 1 No.)**" to be installed at **Division of Microbiology, ICAR-IARI, New Delhi**, from the reputed **supplier/manufacturers who can supply the required material**,

1) Tender Schedule

Tender No.	
Published Date	06.11.2023
Bid Submission start date	06.11.2023 as per Bid Schedule
Last date & time for submission of bid	As per Gem Bid Schedule
Bid Opening date and time	As per Gem Bid Schedule
Address for communication if any	Division of Microbiology ICAR-IARI, New Delhi -110012

2) Details of Tender Deposits :-

- Tentative cost of Bid: Rs. 9,90,289.00 (approx.)
- Earnest Money Deposit: Rs. **Rs. 30,000/- (Rupees thirty thousand only)**,
- Performance Security Deposit: 10% of the contract value. (The performance security should remain valid for a period of sixty days beyond the date of supply, commissioning and installation of the item)
- **The online BoQ Bid document can also be viewed from IARI website www.iari.res.in and www.gem.gov.in**

Note : In case, a holiday is declared by the Government on the day of opening bids, the bids will be opened on the next working day at the same time. The IARI reserves the right to accept or reject any or all the tenders without assigning any reason. Please note that only online bids will be accepted.



DIVISION OF MICROBIOLOGY
ICAR- INDIAN AGRICULTURAL RESEARCH INSTITUTE
Pusa, New Delhi - 110 012



To

Dear Sir(s),

Online Tenders are hereby invited by Director, Indian Agricultural Research Institute (IARI) on behalf of Secretary, Indian Council of Agricultural Research (ICAR), New Delhi for "**Microscope with camera and software**" to be installed at Division of Microbiology, ICAR-IARI, New Delhi.

1. The terms and conditions of the contract are those contained in the General Conditions of contract applicable to the contracts placed by the ICAR-IARI as detailed in the tender forms. Please submit your rates in the GeM BOQ bid form if you are in a position to furnish the requisite supply, Commissioning and installation in accordance with the requirements stated in the bid.
 - An Earnest Money Deposit [Bid Security] of Rs. 30,000/- (Rupees Thirty thousand only) must be deposited (physically) in the form of Demand Draft/Pay Order/FDR payable to **In favour of Director, ICAR-Indian Agricultural Research Institute payable at New Delhi - 110012** to Asstt. Admn. Officer, Division of Microbiology (in the office), ICAR-IARI, New Delhi -110012 on or before the last date/time of submission of GeM Bid.
 - Exemption from EMD submission is meant for procurement of only goods produced and service rendered by MSEs and not for any trading activities by them.
 - The rates quoted by each firm for this in bid should be valid for 180 days and should be quoted both in words and figures failing which the same is liable to be rejected.
 - No request for alteration in the rates once quoted will be permitted.
 - The rates to be quoted should include cost of each and every item including transportation cost, manpower cost and taxes etc. The IARI shall not bear any extra charge for the same.
 - Conditional bids shall not be considered. No overwriting or cutting is permitted in the tender documents. Such bids will be rejected out-rightly.
 - Only those firms will be considered for financial bid who will qualify in the technical bid.
 - Each page of the technical bid must be signed by the Vendor while submitting technical bid.
 - If Vendor does not accept the offer, after issue of letter of award by IARI within 01 day, the offer made shall be deemed to be withdrawn without any notice & earnest money forfeited.
2. An amount @ 10% of the estimated value of contract is to be deposited by the selected firm/successful Vendor as Performance Security Deposit (Performance Bank Guarantee) only after issuance of Supply order through GeM portal/this office. In the event of non-deposition of the same, the earnest money will be forfeited. No interest on Earnest Money (EMD) and Performance Security Deposit (Performance Bank Guarantee) shall be paid by the IARI to the Vendor.



DIVISION OF MICROBIOLOGY
ICAR- INDIAN AGRICULTURAL RESEARCH INSTITUTE
Pusa, New Delhi - 110 012



3. **The following document/vouchers are required to be uploaded with the Technical Bid in following manner with page number of each papers/documents, uploaded.**
- (a) Scanned copy of Earnest Money Deposit (EMD)
 - (b) Scanned copy of Registration Certificate of the firm under Company/Shops & Establishment Act of the respective state for this purpose.
 - (c) Scanned copy of valid registration certificate issued by National and Small Industries Corporation (NSIC), (MSME) if applicable.
 - (d) Scanned copies of proofs of minimum last three year's i.e. 2020-21, 2021-2022 and 2022-2023 satisfactory supply, installation and commission of the product.
 - (e) Scanned copy of proof of minimum turnover of the firm not less than Rs.10,00,000 (Rupees Ten Lakh Only) during each of the last three financial years with balance sheet duly approved by Chartered Accountant.
 - (f) Scanned copies of Income Tax (PAN), Service Tax /GST Registration Certificates
 - (g) Scanned Copy of ISO certificate with literature of the equipment "**Microscope with camera and software**"
 - (h) The firm/agency must enclose a certificate indicating that there is no criminal legal suit pending or contemplated against it. An Undertaking as per attached Format duly attested by Notary on a non-judicial stamp paper of value of Rs.100/- (Rupees One Hundred Only) regarding their non-blacklisting by any of the Govt. Departments, Public Sector Undertakings and/or by Central Vigilance Commission during the last three years.

Yours faithfully,
Sd/-


सहायक प्रशासनिक अधिकारी
Assistant Administrative Officer
Microbiology Division, ICAR-IARI,
New Delhi
भा.क.अनु.प.-भारतीय कृषि अनुसंधान संस्थान
ICAR-Indian Agricultural Research Institute
नई दिल्ली / New Delhi-110012



DIVISION OF MICROBIOLOGY
ICAR- INDIAN AGRICULTURAL RESEARCH INSTITUTE
Pusa, New Delhi - 110 012



TECHNICAL BID APPLICATION for purchase of "Microscope with Camera and Software"

Sl. No.	Technical Requirement	Particulars
1.	Name of the Tendering /Firm/Agency/ Contractor : (Attach attested copy of certificate of registration).	Yes/No (Page No.)
2.	Name of Director of Company/ Active Partner of the firm/: authorized Agent/ Proprietor.	Yes/No (Page No.)
3.	Full address of Operating/ Branch Office Telephone No., Fax No., E-mail address:	Yes/No (Page No.)
4.	Full address of Operating/ Branch Office at: Delhi/ New Delhi	Yes/No (Page No.)
5.	Banker of the Company/ Firm/ Agency/ Contractor with Full address (Attach certified copy of latest Bank statement)	Yes/No (Page No.)
6.	Scanned copy of Earnest Money Deposit (EMD)	Yes/No (Page No.)
7.	Scanned copy of Registration Certificate of the firm under Company/Shops & Establishment Act of the respective state for this purpose.	Yes/No (Page No.)
8.	Scanned copy of valid registration certificate issued by National and Small Industries Corporation (NSIC), (MSME) if applicable.	Yes/No (Page No.)
9.	Scanned copies of proof of minimum last three year's i.e. 2020-21, 2021-2022 and 2022-2023 satisfactory supply, installation and commission of the product.	Yes/No (Page No.)
10.	Scanned copy of proof of minimum turnover of the firm not less than Rs.10,00,000 (Rupees ten lakh Only) during each of the last three financial years with balance sheet duly approved by Chartered Accountant.	Yes/No (Page No.)
11.	Scanned copies of Income Tax (PAN), Service Tax /GST Registration Certificates.	Yes/No (Page No.)
12.	Scanned Copy of ISO Certificate with literature of the equipment.	Yes/No (Page No.)
13.	The firm/agency must enclose a certificate indicating that there is no criminal legal suit pending or contemplated against it. An Undertaking as per attached Format duly attested by Notary on a non-judicial stamp paper of value of Rs.100/- (Rupees One Hundred Only) regarding their non-blacklisting by any of the Govt. Departments, Public Sector Undertakings and/or by Central Vigilance Commission during the last three years.	Yes/No (Page No.)
14.	Additional Information/detail, if any must be supported by attested certificate.	Yes/No (Page No.)
15.	Whether you agree to bear the cost of equipment. If fails to supply, commissioning the support within week time. Please attach undertaking as per <i>per Annexure-1</i> .	Yes/No (Page No.)

I, the undersigned certify that I have gone through the terms and condition mentioned in the GeM Bid document and undertake to comply with them. The rates quoted by me are valid and binding upon me for the entire period of contract.

Date :
Place :

Signature of Authorized person
(Full Name and Designation)
Seal :

SPECIFICATION FOR MICROSCOPE WITH CAMERA AND SOFTWARE

1. Microscope should be CE and/or ISO certified with 5 Years Warranty period.
2. The system should have trinocular head, 30° inclined and 360° rotatable.
3. Eye Piece should be High Wide Field 10X/22 mm or better. Diopter adjustment. IPD: 48-75 mm.
4. Rotating system allows ergonomic positioning of both tubes in high and low position.
5. The system should have Reversed Quintuple nose piece with Infinity Optical System
6. Plain Flurex Achromatic objectives 4X/0.10 to 10X/0.25, 40X/0.65, and 100X/1.25 oil immersion.
7. Stage should be scratch resistant reckless stage 145-160 x 115-140 mm stage with integrated 65-80 x 30-40 X-Y or better
8. Total travel approximately 18 mm. Coaxial coarse, and fine focusing with 180 graduations. Precision 200 micron per rotation or better.
- 4 Abbe condenser N.A. 1.25 w iris diaphragm and filter holder. Condenser with slot for optional slider for dark field & phase contrast. Illumination should be 3 -5 W adjustable Köhler illumination.
9. Microscope should be supplied with 4 Fluorescence attachment with 4 LEDs for Blue, Green, Violet and UV excitation, 4 filter sets.
10. Fluorescence attachment with Epi-illumination with four 5W LEDs for fluorescence excitation from 450 to 470 nm (blue), 515 to 535 nm (green), 390 to 400 (violet) and 360 to 370 nm (ultraviolet).
11. Zoom ratio should be 40X, 100X, 400X and 1000X
12. Resolution of Camera in terms of lines per mm - Pixel 2748 x 2200 with pixel size of 4.54 micron or better
13. USER Manual (Instruction manual) should be provided in original as hard copy as well as soft copy.
14. Installation user list of last 5 years should be provided
15. Instrument qualification and Operation qualification certificate should be provided
16. Authorization certificate from principal company should be included with the quotation.
17. External 100-240V power supply. External 110 or 230 V power supply
18. Supplied with UV protection shield.
19. All optics should be anti-fungus treated and anti-reflection coated.

CAMERA WITH 1" C MOUNT Adapter.

1. Sensor should be 1 inch or higher with 5440 x 3648 pixels, 18 MP or higher, Peltier cooled
2. Suitable for fluorescence microscopy Pixel size 2.4 µm x 2.4 µm or higher and with RGB filter C-mount thread. Up to 5 frames per second (5440 x 3648 pixels) Sensitivity 462 mV @ 1/30 sec Interface USB-3
3. Two-stage cooling System -45 °C below camera body temperature.
4. Should be with a carrying case together with USB cable, 1x C-mount objective, calibration slide and 100-240 Vac to 12Vdc/3A power adapter for Peltier cooling.

Image analysis software with morphometry on live as well as on still image.

1. Software should be well connected with AI (Artificial Intelligency) uses.
2. Segmentation & counting, stitching of image, extended depth of focus etc.
3. Brightness, contrast and saturation of captured image can be adjusted.
4. Parameters for exposure time, white balance and colour control.
5. The software should have specific functions for fluorescence microscopy such as combining captured fluorescence images.
6. Compatible with windows 10 and or/above; 32- and 64-bits configuration.
7. A Mac OS light version should also be available for capturing images.



Financial Bid

FINANCIAL BID MUST BE QUOTED IN GeM Portal in the BOQ ONLY ONLINE MODE.

ANY OFFLINE DOCUMENTS (TECHNICAL/FINANCIAL) WILL NOT BE ACCEPTED.



**DIVISION OF MICROBIOLOGY
ICAR- INDIAN AGRICULTURAL RESEARCH INSTITUTE
Pusa, New Delhi - 110 012**



Annexure-1

UNDERTAKING

I/We have read and understood with Terms and Conditions contained in the bidding document and understand of the equipment. I/We do hereby declare that all the details provided in this bid form are true to the best of my/our knowledge and belief and any mis-representation of facts will render me/us liable to any action as may be deemed fit by INDIAN AGRICULTURAL RESEARCH INSTITUTE.

I/We declared that Supply, Installation and commissioning of the product “**Microscope with camera and software**” will be done within stipulated time mentioned in the Technical Bid after obtaining the order/contract by the ICAR-IARI, New Delhi only through GeM.

Date :
Place :

**Signature of Authorized person/firm
(Full Name and Designation)
Seal :**