Dated: 05<sup>th</sup> of February, 2020

Tender/Bid invited for scientific equipment required Under SERB sponsored research project entitled "Morphological and molecular characterization of the parasitic monogenoids (Platyhelminthes) of exotic ornamental fish in India"



Issued on 05<sup>th</sup> of February, 2020

DEPARTMENT OF ZOOLOGY UNIVERSITY OF LUCKNOW LUCKNOW-226007 Notice inviting tenders (NIT) for scientific equipment

Tender no. LU-ZOOLOGY/SERB/2019

Dated: 05<sup>th</sup> of February, 2020

Sealed tenders are hereby invited from the original equipment manufacturer or their authorized dealers for the supply and installation of undermentioned scientific equipment in the Department of Zoology, University of Lucknow, Lucknow–226007: 1) a motorised upright fluorescence microscope with high speed CCD camera and high–end image analysis workstation, 2) a refrigerated centrifuge and 3) a water bath

The tender form is given in the annexure–1. The detailed specifications of instruments to be procured are given in the annexure–2. The general terms and conditions are given in the annexure–3.

Hard copies of all quotations, along with all documents necessary to ensure the illegibility criteria, may be sent so as to reach to the Head, Department of Zoology, University of Lucknow, Lucknow–226007 on or before 15<sup>th</sup> of February, 2020. The tenders will be opened on 17<sup>th</sup> of February at 3:00 pm.

#### ANNEXURE-1

## Tender form

The bidders should furnish the under mentioned information and also enclose copies of the respective documents as mentioned below failing which their bids will not be considered.

- 1. Name of the firm with full address:
- 2. Name of the Proprietor:
- 3. Telephone / Mobile number:
- 4. Bank account number(Please enclose photocopy):
- 5. Income Tax Permanent Account Number (Please enclose photocopy):
- 6. G.S.T. Registration no. (Please enclose photocopy):
- 7. Income Tax Return for the past three years (Please enclose photocopies):
- 8. Deed & registration of the firm (Please enclose photocopy):
- 9. Details of Demand Draft towards the cost of Earnest Money Deposit (EMD):
  - a) Draft No. and Date:
  - b) Name of the issuing Bank:
  - c) Amount:

Demand Drafts should be drawn in favour of Finance Officer, University of Lucknow, Lucknow, payable at any Nationalized Bank at Lucknow. Tenders/Bids not accompanied by the requisite demand drafts shall not be considered and shall be rejected.

### **ANNEXURE 2.**

## The detailed specifications of instruments to be procured

1. Motorized upright fluorescence microscope with CCD cooled camera and highend image analysis workstation

Quantity: 01

- 1). Microscope body: A microscope for brightfield, darkfield, phase contrast, differential interference contrast, and fluorescence applications with built—in (automated Koehler) LED illumination for all contrast modes; built—in coarse and fine focusing knobs with different focusing functions; *automated objective nosepiece* with 6 or more positions.
- **2).** Condenser: Automated turret condenser for *all microscopy techniques* with 7 or more positions.
- **3). Objectives:** Fluorescence grade objectives suitable for above mentioned contrast methods: 4x, 10x/PH1, 20x/PH1, 40x/DIC (N.A. 0.75 or more), and two separate 100x/OIL each for DIC and PH (N.A. 1.30 or more). All objectives but 40x and 100x should be of semi-chromatic/fluotar; 40x and 100x should be apochromatic.
- **4).** Eye pieces: Pair of eye pieces of at least 10x magnifications with 22 mm or higher field of view and dioptre adjustment for both eyes.
- **5). Observation tube:** Trinocular widefield tube with 0/100 beam splitter for acquiring max signals.
- **6). Stage:** Ceramic coated XY motorized/mechanical stage with coaxial XY drive, double slide holder, and both right and left hand operation.
- **7). Fluorescence Illumination:** Motorized fluorescence turret with 5 or more positions, control panel for changing the wavelength and controlling intensity, LED based illumination for UV, Blue, Green, Yellow and Red excitation, pixel shift corrected *bandpass* fluorescence filter sets for DAPI/Hoechst, FITC/GFP and TRITC/Rhodamine/Cy3.
- **8).** Camera: High resolution dual mode (monochrome & colour) peltier cooled scientific CCD/CMOS 2/3—inch chip camera with 2.8 MP resolution, image acquisition of 40 fps or better with full frame in both modes, and appropriate C-mount adaptor.
- 9). Software: Licensed imaging software for automated acquisition, mark and find, image overlay (from different contrast methods), multi focus, interactive measurements, fluorescence multichannel acquisition, intensity measurements, counting, line profile, spatial measurements such as length, width, area, perimeter etc. Software should control all the automated components including microscope and light source.
- **10). Data Processing Unit:** Compatible data processing unit, preferably with Mac OS, at least 27–inch monitor, wireless keyboard and optical mouse with suitable laser jet printer and UPS with at least 30 minutes backup.

- **Note:** 1. Microscope, camera and software MUST be from same manufacturer for better integration and hassle-free software updates.
  - 2. Warranty of 2 years or more directly from the date of installation directly from the manufacturer.

## 2. Refrigerated Centrifuge

## Quantity: 01

- 1). Maximum RCF 21,000 xg.
- 2). Maximum speed above 14,800 rpm.
- **3).** Dual row rotor to accommodate minimum of 18 tubes of two different volumes (1.5/2.0 mL **and** 0.5 mL) in the same run.
- **4.)** Adapters for 0.2 mL 8-Tube PCR Strips
- **5).** The rotor should be tested and approved third party for biocontainment.
- **6).** Large LED display for time and speed.
- 7). Max Noise Levels: 50 dBA.
- **8).** Accelaration/Deccelaration time 10Sec/12 Sec.
- **9.)** Temperature range from -9°C to +40 °C per 1°C increment.
- **10).** Time set range 1 to 99 min, 1 min increments.
- 11). Toggle between RPM and RCF.
- 12). Induction maintenance free rotor.
- 13). CSA certified, CE marked, IVD compliant, and Certified biocontainment.
- **14).** Warranty of minimum 2 years from the date of installation directly from the manufacturer.

## 3. Water Bath

## Quantity: 01

- 1). Chamber capacity: 2 L or more capacity.
- 2). Temperature range: Amb to 90°C.
- 3). Temperature stability: +/- 0.1°C.
- **4).** Temperature uniformity@37°C: +/- 0.2°C.
- **5).** Temperature display: Bright LED.
- **6).** Dimension (LxWxH): Approx. 5x6x5.5 inches.
- 7). Facility such as integrated drain screw for clean draining of the bath.
- 8). UL listed and CE marked; US FDA class I medical device.
- 9). Warranty of 1 year or more directly from the manufacturer.

# ANNEXURE-3. General terms and conditions

### 1. Time Schedule:

Date of uploading of bid document: : by 5:00 pm of 05<sup>th</sup> of February 2020

Last date and time for receipt of tenders : by 12:00 pm of 15<sup>th</sup> of February 2020.

Date and time for opening of bid : by 3:00 pm of 17<sup>th</sup> of February 2020.

Place of submission of tender : Head, Department of Zoology

University of Lucknow Lucknow–226007

**2. Tender form:** Tender form can be downloaded free of cost from the website of Lucknow university. With tender form, specification of equipment to be supplied must be written, sealed and signed by the authorized signatory.

**3. Validity of tender:** 90 days from the date of opening of tender.

4. **Earnest Money Deposit (EMD):** Following amount is to be furnished with the tender in the form of demand draft only in the name of Finance Officer, University of Lucknow, Lucknow–226007 (no interest is payable on this amount):

a motorised upright fluorescence microscope
 a refrigerated centrifuge
 a water bath
 Rs. 20,000/ Rs. 3000/ Rs. 1000/-

- **5.** Capacity: The firm should be capable of mobilizing adequate arrangement for the supply of the scientific equipment required in the lab of Dr. Amit Tripathi, Department of Zoology, University of Lucknow, Lucknow–226007.
- **6. Price quote:** The price should be quoted FOR destination indicating the basic price, maximum institutional discount on basic price, taxes and duties as applicable. The price should also be inclusive of full installation on site with full functionality demonstration.
- **7. Qualifying the bid:** The lowest bid which meets the specification and scientific use will be qualified for the bid.
- **8. Payment:** No advance amount will be given; the final payment shall be made only after completion of the work subject to certification by the principal investigator-incharge through the Finance & Accounts Office of the University of Lucknow.

- **9. Delivery period:** The delivery period should preferably be within 08 weeks from the date of supply order or within the extended time as has been allowed by the University.
- **10. Penalty:** Penalty @ 10% of the value of the order shall be imposed for every day of delay in the supply of the full order. Also, non-compliance of order, in time, will be treated as non-compliance of the terms and conditions.
- **11. Arbitration:** In case of any dispute, the decision of University of Lucknow shall be binding. University of Lucknow has the right to cancel all or any of the tenders without assigning any reason.
- **12. Legal jurisdiction:** The legal dispute, if any, shall be subject to the jurisdiction of court at Lucknow only.
- 13. The University of Lucknow, reserves absolute rights to amend or withdraw any of the terms and conditions contained in the tender document or to reject the lowest or any or all tenders without assigning any reason. The decision of University of Lucknow in this regard shall be final and binding on all.
- 14. For any clarification and further details contact Dr. Amit Tripathi (Telephone No: 9580270209) or contact in person during office hours.

For The Head, Department of Zoology
Dr. Amit Tripathi
Assistant Professor
Principal Investigator, SERB sponsored project
Department of Zoology
University of Lucknow, Lucknow–226007