

DEPARTMENT OF BIOTECHNOLOGY Indian Institute of Technology, Madras, Chennai, 600 036.

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Dr. D. KARUNAGARAN

Professor and Head Date: 22.03.2016

Ref: BT/SMAH/2015/042/SPL

Dt. 22.03.16

Due Dt.05.04.16

- 1. Quotations are invited in duplicate for the various items shown below/overleaf/ enclosed list.
- 2. The quotations duly sealed and super scribed on the envelope with the reference No. and due date, should be addressed to the undersigned so as to reach him on or before the due date stipulated above.
- **3.** The quotations should be valid for sixty days from the due date and the period of delivery required should also be clearly indicated.
- **4.** If the item is under DGS & D Rate Contract, Rate Contract Number and the price must be mentioned. It may also please be indicated whether the supply can be made direct to us at the rate contract price. If so, please send copy of the R.C. (Please note that we are not Direct Demanding Officers).
- **5.** Relevant literature pertaining to the items quoted with full specifications (and drawing, if any) should be sent along with the Quotations, wherever applicable. Samples if called for should be submitted free of charges and collected back at the supplier's expenses.
- **6. Local Firms:** Quotations should be for free delivery to this Institute. If quotations are for Ex-Godown, delivery charges should be indicated separately.
- **7. Firms outside Chennai:** Quotations should be for F.O.R Chennai. If F.O.R. Consigner stationer freight charges by passenger train/lorry transport must be indicated. If Ex-Godown, Packing, forwarding and freight charges must be indicated.
- **8.** The rates of Sales/General Taxes and the percentage of such other taxes legally leviable and intended to be claimed should be distinctly shown along with the price quoted. Where this is not done, no claim for Sales/General Taxes will be admitted at any stage and on any ground whatsoever. **The taxes leviable should take into consideration that we are entitled to have**

concessional sales tax applicable to non-government educational institutions run with no profit motive for which a Concession. Sales tax certificates will be issued at the time of final settlement of the bill.

- **9.** Goods should be supplied carriage paid and insured.
- **10.** Goods shall not be supplied without an official supply order.
- **11. Payment:** Every attempt will be made to make payment within 30 days from the date of receipt of bill/acceptance of goods, whichever is later.

SPECIFICATIONS FOR SCIENTIFIC GRADE CMOS CAMERA:

Effective no of pixels: 2048 X 2048 pixels.

Pixel Size: 6.5 um X 6.5 um

Effective area should be above 12mm X 12mm

Full Well capacity 25,000 electrons or above.

Frame Rate: 25 fps or more @ full resolution

16 bit A/D conversion

Exposure time 1ms to 10 seconds.

C Mount adaptable.

Should be able to be mounted onto the existing Nikon TE2000 Microscope and the Camera should be connected either using a USB 3.0 connection or a dedicated camera interface.

Responsible of the supplier to integrate the camera onto the Microscope and demonstrate the system completely.

SPECIFICATIONS of IMAGE ANALYSIS SOFTWARE:

Software that should be able to control, acquire and do analysis of Images from CCD or sCMOS Camera's and should have the following features:

- Should be able to capture, do analysis by controlling a Nikon TE-2000E PFS Microscope.
- Should be able to have a fully automated acquisition and device control through full sixdimensional image acquisition and analysis (X,Y,Z Time, Multi Channel, & Multipoint)
- Should have capability to control most of the CCD/CMOS Camera's from leading manufacturers.
- Capability to do a Z Stack
- Multi Channel Fluorescence
- Multi Position,
- Annotation
- 2D/3D View
- Capability to apply variety of Filters for Image Enhancement.
- Large Image Stitching
- Auto measurement
- Ability to Generate Report.

SPECIFICATIONS for A COMPUTER SYSTEM

Intel i5 Processor with 4GB or 6 GB more RAM, 2 GB Dedicated Graphics Card with nVidia based.1TB Hard Disk preferably from a branded company.

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