

**Minutes of Pre-Bid Conference (PBC) held on 19.12.2019 for proposed procurement of (Research Grade Upright Microscope for DIC & Fluorescence Applications with Digital Imaging) ”- 01 No.**

As scheduled (PBC) has been conducted on 19.12.2019 for proposed procurement of “(Research Grade Upright Microscope for DIC & Fluorescence Applications with Digital Imaging)”. – 01 No.

**Chairpersons / Members of the Technical Sub Committee (TSC ) present during PBC including domain experts present during PBC -**

1. Dr. R. Sankarnarayan, Chairperson
2. Dr K Thangraj, Member
3. Dr Anant B Patel, Member
4. Smt. Asha Ramesh, Member
5. Dr B Raman, Member
6. IO/PL: Dr. P Chandra Shekar
7. Domain Expert – Dr. Nandini Rangarajan
8. Domain Expert – Dr. Sonal Nagarkar Jaiswal
9. Domain Expert – Dr. Pavithra L Chavali
10. Domain Expert – Mr. Ravindra Chakravarthi

**Members of TSC who could not attend**

3. Domain Expert- Dr. Puran Singh Sijwali
4. Domain Expert- Dr. Jyotsna Dhawan

**Representatives of the following -----firms attended the PBC :**

Sl. No.	Name of the Firm (M/s.)	Name of Representative
1.	M/s. Carl Zeiss India (Bangalore) Pvt Ltd.	Mr. Amarnath
2.	M/s. Towa Optics Pvt Ltd.	Mr. Victor Rozario
3.	M/s..DSS Imagetech Pvt Ltd	Mr. Srikanth
4.	M/s. Leica microsystems	Mr. Kumar



**The following points were discussed during the PBC:**

**Query raised by : Carl Zeiss India (Bangalore) Pvt Ltd.**

NIL

**Query raised by M/s Towa Optics Pvt Ltd**

- 1 Point No 2. 3 – Step Light Path Switching Binocular: Camera 100:0, 50:50/20:80,.0:100
- 2 Point No 9. Please change to Lamp Switch for Transmitted Light on Microscope Body
- 3 Point No 11. Binocular Tube with interpupillary Distance adjustment and eye pieces 10X/22 adjustable.
- 4 Point No 13. A) Plan Fluor4X or 5X /0.13 ; C.Plan Apochromat 20X/0.75
- 5 Point No 16. Universal Condenser NA 0.88
- 6 Point No 23. Please change to CCD/CMOS Camera
- 7 Point No 24. Change Chip size to 2/3" or 6.91 x 4.92 mm Color CMOS camera pixel size of 2.3 X 2.3 microns or more and speed to 15fps at full resolution.

**Query raised by M/s DSS Imagetech Pvt Ltd**

- 1 Point No 6. sextuple revolving objective nosepiece with individual slots DIC Prism slots for each Objective /on the Condenser"
- 2 Point No 9. Switch /knob
- 3 Point No 11. 10x/22
- 4 Point No 13. please change to below A) 4X/5X, B)10X/0.4 Or More , C) 20X/0.75 Or More
- 5 Point No 14. objective/ on the condenser
- 6 Point No 23. Cooled CCD mono chrome camera for Fluorescence imaging with 1.4 mega pixels or more, 1376 X 1032 or more, 6.45 micron or better pixel size, 16mm image diagonal, Peltier cooled sensor temperature less than or equal to 18 deg C or better, 15 FPS at full resolution, USB 3.0/IEEE 1394a.
- 7 Point No 24. 1/2-inch colour CMOS camera for bright field imaging 5 mega pixel or more, 2.2 micron or more pixel size, 15 FPS @ full resolutions, USB 3.0.

**Query raised by M/s Leica**

1. Point no 6: To change as DIC PRISM SLOTS/TURRET
2. Point no.13a : To change to PLAN FLUOR 5x/0.15
3. Point no.16: 6 positions or more
4. Point no.20: 5 Positions or more
5. Point no.23: Scientific CMOS camera with 4.2 MP or more more, 2048X 2048 or more, 6.5 micron pixel size etc...
6. Point no. 24: ½ inch 30 FPS@ FULL Resolution



Points clarified by CCMB Team during PBC –

The above points were discussed in the presence of all the participating bidders and the following clarifications were provided:

1. Point no.2:3 – Step Light Path Switching Binocular: Camera 100:0, 50:50/20:80,0:100
2. Point no:6: DIC PRISM SLOTS/TURRET
3. Point no.9: Lamp switch/knob reflected light and transmitted light on microscope body
4. Point No 11. Binocular Tube with interpupillary Distance adjustment and eye pieces 10X/22 adjustable
5. Point No 13. A) Plan Fluor4X or 5X /0.13 or more ; Plan Apochromat 10x/0.4 or more, Plan Apochromat 20X/0.75 or more
6. Point No 14: no change
7. Point No 16. Universal Condenser NA 0.88 or more with 6 positions or more
8. Point No 23: Back illuminated Scientific CMOS camera with QE 95%, dynamic range 25000:1, 2Kx2K resolution with a pixel size of less than 6.45micron, cooling: -20 Deg C or more below ambient temperature.
9. Point No 24. 2/3 inch or 1/2-inch or 6.91 x4.92 mmmcolour CMOS camera for bright filed imaging 5 mega pixel or more, 2.2 micron or more pixel size, 15 FPS @ full resolutions, USB 3.0.

All the participating firms informed that they do not have problem with other points of tendered specifications and requirements. Participating bidders have been informed that points raised by them during PBC will be examined by CCMB's **Technical Sub Committee (TSC)** constituted for the purpose of procurement of said equipment and **post PBC changes** in tendered specifications and requirements to be agreed after due consideration of the same by TSC, if any, will be uploaded in **CPPP** as part of **revised/amended** tendered specifications.

**The other points/queries sent were also discussed and clarified as per points raised by the bidders during discussions.**

Reply/ changes to the Points discussed during PBC with changes agreed (if any) will be uploaded in due course at **CPPP** for information and reference of prospective bidders on or before **24.12.2019 (17.00 Hrs.)** .All bidders are requested kindly to take a **note of changes** in tendered specifications subsequent to PBC held today i.e. **19.12.2019** before they start submitting their online bids through **CPPP**.



R. Sankarayan  
(Dr. R Sankarnarayanan)

K. Thangraj  
(Dr. K Thangraj)

A. B. Patel  
(Dr. A B Patel)

Asha Ramesh  
(Smt. Asha Ramesh)

Chandra Shekhar  
(Dr Chandra Shekhar)

Raman  
(Dr Raman)

Jyotsna Dhawan  
(Dr. Jyotsna Dhawan)

Puran Singh Sijwali  
(Dr. Puran Singh Sijwali)

Nandini K.  
(Dr. Nandini Rangarajan)

Sonal Nagarkar Jaiswal  
(Dr. Sonal Nagarkar Jaiswal )

Pavithra L Chavali  
(Dr. Pavithra L Chavali)

Ravindra Chakravathi  
(Mr. Ravindra Chakravathi)

**Participating Bidders Representatives (Firm Name and Signature of representative participating in the PBC)-**

M/s. Carl Zeiss India Pvt Ltd.

Amarnath  
(T. Amarnath)

M/s. Towa Optics Pvt Ltd

Pradeep

J. A. V. K. K. K.

M/s. DSS Imagetech Pvt Ltd

A. Srikanth

A-SRIKANTH

M/s Leica Microsystems

K. M. V. K. K. K.  
19/12/19