



भारतीय समुद्री विश्वविद्यालय Indian Maritime University

(केन्द्रीय विश्वविद्यालय, भारत सरकार / A Central University, Govt. of India)
कोलकाता परिसर / Kolkata Campus

Dated : 09/01/2019

Corrigendum

Subject: Tender for Supply of Inverted Microscope for Research in Industrial Applications at IMU Kolkata Campus

Ref: Tender No. IMU-KC/AR/MICROSCOPE dated 22.12.2018 & Pre-bid meeting held on 04 Jan 2019, 1430 hrs at IMU-Kolkata Campus.

Pre-bid meeting was held on 04 Jan, 2019. Keeping in view the suggestions given by the procurement committee with reference to the discussions with the attending bidders, the following amendments are being made in the tender:

Existing Clause 5.3: Tech Specifications: As per the existing tender, Universal turret condenser with minimum numerical aperture 0.30 or above and minimum, working distance 60mm or above was mentioned. Condenser should be coded and should have the facility of tilting.

New recommendation: Universal turret condenser with minimum numerical aperture 0.30 or above and minimum, working distance 60mm or above. Condenser should be coded.

Existing Clause 5.7: Tech Specifications: As per the existing tender, Frame mounted TFT touch-screen Monitor, keys for switching TL/RL illumination, circular operation key unit right and left, Light Manager and Contrast Manager was mentioned.

New recommendation: TFT touch-screen Monitor, keys for switching TL/RL illumination, circular operation key unit right and left, Light Manager and Contrast Manager.

Existing Clause 5.13: Tech Specifications: As per the existing tender, Filters - Grey filter, blue filter, White balance filter. Contrasting Techniques Module. Reflector Modules for Bright field & Dark Field Observation. Future Upgradable with Polarizer — Analyzer, DIC & Circular DIC was mentioned.

New recommendation: Polarizer — Circular DIC is removed from requirements. Rest of the technical specifications remain unchanged.

Existing Clause 5.14 Tech Specifications : As per the existing tender un objectives: Plan-semi apochromat or equivalent 5x/0.13, 10x/0.25, 20x/0.60, 50x/0.7 & 100x/0.8 Bright/Dark Field was mentioned.

New recommendation: It should be Plan apochromatic.

Existing Clause 5.17 Tech Specifications: Digital Camera resolution — Live Imaging with 5.0 Mega Pixel, Digitization: 8 and 12 Bit / Pixel, Spectral Range: 300-1000nm. Dynamic Range: Typical > 4800: 1, Exposure: 0.1m.sec — 4 Sec. USB 3 interface, Live Frame rate: 2464 x 2056 - 36 fps. & 1232 x 1028 - 88 fps was mentioned.

New recommendation: Digital Camera resolution — Live Imaging with 6.0 Mega Pixel or better, Digitization: 14 Bit / Pixel or more, Spectral Range: 400 – 700 nm. Dynamic Range: Typical >1380: 1, Exposure: 0.1m.sec — 4 Sec. USB 3 interface, Live Frame rate: 35 fps or better @ 848 x 564; 10 fps @ 4248 x 2832 or better.

Existing Clause 5.25 Tech Specifications: The microscope should be equipped with a digital colour CCD camera of at least 5 MP.

New recommendation: The microscope should be equipped with a digital colour CCD camera of at least 6 MP.

It is being additionally added that the microscope and its software should facilitate studies related to the following topics / subjects:

1. Surface Corrosion and contamination
2. Crystallography high resolution
3. Weld analysis
4. Non – destructive studies
5. Grain size analysis
6. Multiphase analysis
7. Non – metallic inclusions
8. Graphite in cast iron and other alloys
9. layer thickness
10. Failure investigation


DIRECTOR