

दूरभाष Ph : 91-80-25530672-76 फैक्स Fax : 91-80-25534043 इ-मैल email: astron@iiap.res.in

भारतीय ताराभौतिकी संस्थान

INDIAN INSTITUTE OF ASTROPHYSICS कोरमंगला / KORAMANGALA बेंगलूर / BANGALORE - 560 034.

Ref: PUR/IMP/GT/VSN/PM/21/2012-13.

April 08, 2013.

CORIGENDUM - II

Sub : Extension of date for submission of Tender Bids for "Highly polished Aluminum Coated Optical Mirrors - reg".

Ref : Global Tender Notice No. PUR/IMP/GT/VSN/PM/21/2012-13 Dated : 18/03/13.

- 1. Extension of Last date for submission of "Tender bids" (2 bid system) extended up to 22/04/2013.
- 2. The Tender / Technical bids will be opened on 22/04/2013 at 15 30 hrs in the presence of Bidders or their authorized agents at IIA, Koramangala, Bangalore.
- 3. Roughness specifications annexed for Highly polished aluminum coated optical mirrors.

All other terms and conditions are remain unchanged.

35

Purchase Officer IIA, Bangalore. - 34.

| साथ आध्यकारी |
|----------------------------------|
| PURCHASE OFFICER |
| ध्यासीच रागधीसिकी संस्थान |
| INDIAN INSTITUTE OF ASTROPHYSICS |
| |
| arapper BANGALORE-560 034 |

Roughness Specifications for Highly polished aluminum coated optical mirrors:

| Mirror Shape | Round | Round | |
|------------------------------------|---|--|---------------------------|
| Туре | Spherical | Flat | |
| Radius of Curvature | 2000 mm (concave) | | Please sceltre Change. |
| Diameter | 4.0" (101.6 mm) | 2.0" (50.8 mm) | |
| Coating Type | Al Coating | Al Coating | |
| Material | Zerodur & Bk 7 / Fused Silica | Zerodur & Bk 7 / Fused Silica | |
| Thickness | ≤ 1" (25.4 mm) | $\leq 0.5" (12.7 \text{ mm})$ | |
| Clear Aperture | \geq 95% of diameter | \geq 95% of diameter | |
| Scratch-dig | 0-0 over entire surface | 0-0 over entire surface | |
| Wavelength Range | 400 to 700 nm | 400 to 700 nm | |
| Reflectivity | ≥ 90% @ 400-700 nm | ≥ 90% @ 400-700 nm | |
| Surface Flatness (RMS) | ≤λ/40 at 632.8 nm over entire diameter | $\leq \lambda/40$ at 632.8 nm over entire diameter | |
| Surface Microroughness (RMS) | \leq 1Å (±0.10Å) after coating | Different samples of roughness 1Å (±0.10Å), 2Å (±0.25Å), 3Å (±0.25Å), 4 Å (±0.25Å), 5Å (±0.25Å), 6Å (±0.25Å), 7Å (±0.25Å), 8Å (±0.25Å), 9Å (±0.25Å), 10Å (±0.25Å) after coating. | |
| Quantity | 2 numbers for each type of material (2*2=4) | 2 numbers for each surface Microroughness and 2 numbers for each type of material 2*(10*2)=40 | - |

Profilometer data with 1x/2.5x,5x, 10x, 25x & 50x magnifications should be provided for all the mirrors before and after coating as mentioned below:

- 1. Minimum of 40 measurements over 2.0" diameter with at least 10 measurements in each quarter for each magnification. (OR Equivalent)
- 2. Minimum of 60 measurements over 4.0" diameter with at least 15 measurements in each quarter for each magnification. (OR Equivalent)

3

3. All the mirrors should be provided with appropriate vacuum (10^-3 mbar) compatible mirror holders.

4. Mirror surfaces should be free from particle contamination.