Central Glass & Ceramic Research Institute KOLKATA (WEST BENGAL) INDIA

CORRIGENDUM

REFERENCE NO.:- P/NC/49/KB/SO(SKM)/OTE/22-23

DATE: 14/09/2022

NAME OF SUPPLY: PRISM COUPLER FOR MEASUREMENT OF REFRACTIVE INDEX OF BULK OXIDE AND CHALCOGENIDE GLASSES

CONSEQUENT TO THE PRE-BID MEETING HELD ON 09.09.2022 AGAINST OUR TENDER ENQUIRY No. P/NC/49/KB/SO(SKM)/OTE/22-23, following Technical Specifications may be read as follows instead as mentioned in the tender document.

Technical specifications

Prism coupler for measurement of refractive index of Bulk oxide and Chalcogenide Glasses

1. Operating Wavelengths:

Visible Range:

635±5 nm diode laser, power: Maximum 4 mW 3.39 μm HeNe laser, power: Maximum 3.5 mW

Near infrared Range: Mid infrared region:

10.6 μm laser-low power

2. Refractive index accuracy:

±0.002 at 635±5 nm or better,

 ± 0.007 at 3.39 μm and 10.6 μm or better.

3. Index resolution:

±.0004 at 635 ±5 nm or better,

 $\pm .005$ at 3.39 μm and 10.6 μm or better.

4. Refractive index measuring range: 1.0 - 2.8 or wider for 635 ± 5 nm

2.2- 3.2 or wider for 3.39 μm and 10 μm

Suitable Prisms should be provided for covering the specified range of refractive index at three wavelengths.

- 5. System Configuration:
 - > The equipment should be able to measure refractive index of bulk solid oxide and chalcogenide glasses of visually transparent or visually opaque in nature. The instrument should be capable of measuring solid samples of
 - (i) 10-20 mm (L) $\times 10\text{-}20 \text{ mm}$ (B) $\times 1\text{-}4 \text{ mm}$ (h) or (ii) 10-20 mm (d) and 1-4 mm (t). The coupling of the samples to the prism should be done within 20-60 psi air pressure.
 - ➤ The operation of the equipment should be desktop computer interfaced. The PC should have LCD color monitor display, Windows 10 or higher version, 64-bit. Processor: Intel® Core™ i3/equivalent or better, RAM-8GB or better, hard drive: 1TB or higher, RS232 serial (COM1) port must be available
- 6. Data acquisition and analysis software:

- i. The operating software should be of latest version with update/upgrade support from vendor.
- ii. capable of measuring refractive index at three different wavelengths
- Provision of Cauchy fitting and Sellmeier fitting of dispersion curve and derivation of refractive index at specific wavelengths from the fitting
- 7. Power supply : Single Phase AC supply, 220-240 V, 5 Amps/15 Amps plug connection, $50\pm1~Hz$
- 8. Installation and commissioning: The vendor should specify the requirements for installation of the equipment which are in scope of CGCRI at least 2 weeks before the installation. Installation, commissioning and demonstration will be done by supplier's engineers at buyer's premises free of charge and training should be provided to the concerned scientists/technical persons (4 persons) for two days by using various test materials.
- 9. **Documents:** Equipment should accompany with the user manuals, application notes along with trouble shoot/ maintenance manuals
- 10. Warranty period: 1 year (mandatory)

All the other Tender terms & conditions will remain unchanged.

The above amendments shall amount to amendments of the relevant terms of our Bid Document for CGCRI Tender No. P/NC/49/KB/SO(SKM)/OTE/22-23.

(Anjani Kr. Pandey) Stores & Purchase Officer

कंजनी कुमार पाण्डेय/Anjani Kumar Pandey पण्डार एवं क्रय अधिकारी/Stores & Purchase Officer सीएसआईआर - केन्द्रीय काँव एवं मिरामिक अनुकंधान संस्थान CSIR - CENTRAL GLASS & CERANIC RESEARCH INSTITUTE 196, राजा एस. सी. मीलेगक रोड / 196, Raja S. C. Mullick Road -कोलकारा/Kolkata-700 032