Indian Institute of Technology Kanpur

Call for quotation: Special Specimen holders for HRTEM/Cryo-TEM

IITK/CHM/sverma3/2012.

Dated: 05.03.2012

Closing Date: 12.03.2012

We are interested in acquiring the following TEM holder for High resolution TEM lab. Quotations in sealed envelopes are invited from the prospective vendors/suppliers for these product.

The following minimum specifications have to be satisfied for each of the item.

Item 1. Single Tilt Liquid Nitrogen Cryo Transfer Holder with following specifications

- a. Frost-free specimen transfer with appropriate cryo-shields
- b. High resolution performance
- c. Stable specimen temperature showed be provided to avoid thermal drift to ensure high resolution performance
- d. Specimen securing mechanism: Design should ensure thermal contact between the specimen holder and the frozen hydrated specimen grid
- e. Precise temperature measurement: Provision for monitoring and controlling the Temperature of the holder should be provided.

Item 2. Single Tilt Heating Holder along with accessories with following specifications

- **a. High performance materials:** Mechanical link between the heater and the stage is made of a material with near zero coefficient of expansion to minimize thermal drift (2 nm/min. at the highest operating temperature.
- **b.** Effective temperature control: Temperature at specimen holder tip must be maintained near the temperature of the specimen stage . The temperature variation to be $\pm 3^0$ or better from the set temperature.
- **c. Minimal heat loss design:** Heat loss from the furnace to the specimen tip to be minimized.
- d. **Tilt ranges:** $\pm 40^{0}$ or better
- e. **Temperature ranges**: 1000°C or higher
- f. **Compatibility**: Should be made compatible with any global TEM model to be specified at the time of placing order.

Terms and Conditions: As per IIT Kanpur Rules

- 1. All the claimed specifications of the machine and the attachment should be demonstrated after completion of the installation at our site.
- 2. IIT Kanpur reserves the sole right to decide on the technical specifications over and above the specified ones and best suited machine configuration with appropriate attachments/accessories/add-ons.

<u>Quotations should reach the following address</u> on or before 12 March, 2012 evening 5 pm in closed envelopes.

Professor Sandeep Verma Department of Chemistry, Indian Institute of Technology, Kanpur Kanpur -208016, U.P., India

email: sverma@iitk.ac.in Phone: +91-512-259-7643