

INDIAN INSTITUTE OF TECHNOLOGY KANPUR Department of Chemical Engineering

Contact: Dr. Siddhartha Panda Department of Chemical Engineering Telephone: +91 512 259 6146 Email: spanda@iitk.ac.in, debjani@iitk.ac.in

Enquiry No: IITK/CHE/FIST/PGRL-3-REVISED

Enquiry Date:31/07/2018

Tender Notice

Sealed quotation(s) in Indian Rupees with all technical details so as to reach latest by 3:00 PM on Sep 15, 2018 are invited for the supply of following item

Tender Specifications for Ultramicrotome

$\textbf{(I)} Cryo-upgradable (in future) \ \textbf{Ultramicrotome instrument with following specifications}$

is needed to prepare sample for FESEM imaging:

- Cutting transmission with vibration decoupled gravity stroke and built in anti vibration system. If case built-in antivibration mechanism is not there, the system should be supplied with suitable table with shock absorbing elements and appropriate chair.
- 2) Instrument should be capable to slice the samples as low as 30 nm thickness and it has to be demonstrated by the vendor through submitted proof.
- 3) Preference will be given to the instrument which will work with fully automatic mode as well.
- 4) Instrument has to be supplied with glass knife.
- 5) Cutting window setting 0.2 to 10 mm or better & Return speeds 10, 30 and 50 mm/sec selectable
- 6) Specimen advance indicator 10 segments 20 µm each
- Stereomicroscope (6.3x to 40x) or better with preferably 4 x LED illuminations system for top light, spot light, back light and specimen trans-illumination to enhance observation and clarity.
- 8) Illumination should be independently controllable

- 9) Built in Intensity control for Ioniser
- 10) Fully motorized knife stage for N-S and E-W movement.
- 11) Step movement (from 0.1 to 15µm steps)
- 12) Touch screen display of the Ultra microtome.
- 13) At least four or more memories for speed and feed settings
- 14) Cutting speed setting from 0.1 to 100 mm/s
- 15) Section thickness setting $5nm 15 \ \mu m$
- 16) Knife block 360° rotatable with illumination
- 17) User friendly upgradable software
- 18) Built-in USB port for data transfer.

(II) Specifications for Glass Knife maker for Ultramicrotome:

- 1) Should be 100% balanced break method with high reproducibility
- 2) Variable scoring lengths
- 3) Accurate glass strip positioning
- 4) Drawer system for safe knife removal
- 5) Auto reset of breaking and scoring mechanism
- 6) Push action score for even scoring and adjustable scoring pressure

(III) Accessory kit

- Knife box for 6.4 and 8 mm glass knives 2 pcs
- Grid box for 100 grids 10 pcs
- Dental wax.
- EM loop holder
- Glass strips 6.4 mm, 10 pcs.
- Glass strips 8.0 mm, 10 pcs.
- Trufs for 6.4 mm glass, 500 pcs.
- Trufs for 8.0 mm glass, 500 pcs.
- Embedding mould for 5.6 mm dia. (10 trays).
- Embedding mould for 8.0 mm dia. (10 trays).
- Forceps, straight tips. 2 pcs
- Copper grids 100 mesh, 100 pcs.
- Copper grids 200 mesh, 100 pcs.
- Copper grids 300 mesh, 100 pcs.
- Copper grids 400 mesh, 100 pcs.
- Hot Plate (3 different temperatures)
- Protective Goggles

(IV) Additional Requirements:

1) A suitable online UPS with 30 minutes battery backup should be provided.

2) Demonstration and training at the installation site should be provided.

3) Free of charge training of students in equipment maintenance by the certified company engineers during the warranty period at IIT Kanpur.

4) The service personnel should respond within 24 hrs. and be on campus in 72 hrs. for repairs.

5) Comprehensive Warranty (Labour & Spares): 5 Years. Recalibration of the instrument, if required, should be included in the warranty package.

6) Price of Annual Maintenance Contract(AMC) post the warranty period must be quoted separately.

7) The vendor must have several installations in India, preferably in national institutes and reputed CSIR/other government research laboratories.

Terms & Conditions:

- 1) Quotations must reach undersigned by 15.09.2018 by 3.00 pm
- 2) Quotations should have a validity of minimum of 90 days.
- 3) Atleast 10 users list should be provided with satisfactory certificates.
- Technical specification sheets, authorization certificate or proprietary certificate (if applicable) and any other relevant documentation should be included with the quotation.
- 5) Quotations are required in duplicate: (1) TECHNICAL BID (2) FINANCIAL BID, in separate Sealed envelopes, both to be finally put in one single envelope with Tender Enquiry Number Mentioned clearly in all sealed envelopes.
- 6) The technical bid should include a signed copy of the compliance certificate against the tender specifications. The compliance sheet should clearly include reference (e.g. Page No) to the vendor's online brochure for every technical specification.
- 7) The tender specifications should be justified with company catalogue.
- 8) Please specify the maximum permissible educational discount, if any.
- 9) Delivery of system should be within 3-4 weeks on receipt of the final purchase order.

- 10) The downtime of service should be taken care within 48-72 hours on information, otherwise it is subjected to penalty.
- 11) The rate offered should show both FOB (your international airport) ,CIF (New Delhi) and IIT Kanpur including packing and forwarding, Insurance and fright.
- Please clearly mention the tax rate (like GST etc.) and transportation charges up to IIT Kanpur, India.
- 13) After sales Service in India and warranty period should be clearly mentioned.
- 14) The Institute reserves the right of accepting and rejecting any quotation without assigning any reason.
- 15) Quotations by E-mail will not be accepted.

Kindly mention the enquiry number on the sealed envelope carrying the quotation and send the sealed quotation(s) to the following address:

Dr. Siddhartha Panda Department of Chemical Engineering

Indian Institute of Technology Kanpur 208016

Kanpur, U. P. India

Phone No:+91-512 2596146

Email: spanda@iitk.ac.in, debjani@iitk.ac.in