### INDIAN INSTITUTE OF TECHNOLOGY, DELHI

# **Department of Textile Technology**

## **NOTICE INVITING QUOTATIONS**

# Date of submission extended to 5<sup>th</sup> February 2014

Quotations are hereby invited from Vendors for the supply of a 'Light Scanner for Textile Applications' for the measurement of fibre orientation in nonwoven, roughness & waviness evaluation of textile structures (nonwovens, wovens and knitted) with the following specifications:

<u>Field of view and resolution</u>: Field of view- 0.7 mm x 0.7 mm to 20 mm x 20 mm or more; Minimum x-y resolution- 2 μm; Minimum z resolution – 0.2 μm;

Measuring time/sampling rate: 10s or better

Light source: LED lamp or Strip light projection, fringe projection.

Image capture: CCD camera (2 Mega pixels & above) with power supply.

## Software and display

Software to obtain xyz and xy cloud data and capability to evaluate fibre orientation in xy-plane, various statistical information of peak profiles and 2D and 3D roughness values.

Facility to transfer and store the cloud data for external data processing

Graphical display of roughness and waviness of textile structures and storage of the same for reproduction.

Display obtained 3D images on screen with xyz scale.

Thickness and topological evaluation of textile materials under different compressive loads: Number of peaks/valleys, peak density, average peak height, average thickness, height of lowest & highest peaks, peak to peak distance, peak volume and peak area.

Computer with monitor to control the measurements, display, data processing and storage of data and images.

In built stand to place sample, camera, light source to get required field of view.

#### **Terms & Conditions**

1) Please submit the TECHNICAL and FINANCIAL bids in separate sealed envelopes. Mark the two envelopes clearly as "Technical Bid" and "Financial Bid". Both the sealed envelopes should be sent in a single sealed envelope, with clearly marked as 'Light Scanner for Textile Applications' due on 5/02/2014". The quote should reach the following address on or before 5<sup>th</sup> February, 2014, by 5 PM.

Prof. R. S. Rengasamy
Department of Textile Technology
Indian Institute of Technology (IIT Delhi)
Hauz Khas, New Delhi – 110016.

- 2) In case of import supply the price should be quoted on FOB basis only
- 3) The quotations should be in Indian Rupees or international currency wherever possible and be valid for at least three months.
- 4) Please attach all the technical literature and a list of similar installations done in India and abroad with complete contact address.
- 5) Standard warranty details should be provided and in this case the warranty should be at least for three years.
- 6) Payment should be through irrevocable letter of credit.
- 7) If the quote is being submitted by the representative of the Principals/manufacturer themselves, a valid Agency ship/Dealership Certificate authorizing the agent to quote to IIT Delhi on behalf of the Principals should be enclosed.
- 8) Complete set of manuals for the operation of equipment should be given.
- 9) Clearly specify the installation requirements—such as space, power, frequency, environment (Temperature and humidity) etc.
- 10) If the items quoted are proprietary in nature, please enclose proprietary certificate from the principals stating "certified that\_\_\_\_\_\_ is a proprietary item of M/s. \_\_\_\_\_ and no other manufacturer makes these items.
- 11) If the bidder is an Indian agent, the agency certificate should be enclosed.
- 12) Please produce compliance certificate for the specification.
- 13) Training should be provided free of cost.
- 14) Delivery period should be specifically mentioned and should be as small as possible.
- 15) The products will be used for educational purposes. Hence any applicable institutional discounts should be offered and stated.
- 16) Institute reserves the right to accept or reject any or all the quotations without assigning reason thereof.