

DEPARTMENT OF CHEMICAL ENGINEERING
INDIAN INSTITUTE OF TECHNOLOGY - DELHI
HAUZ KHAS, NEW DELHI - 110016

Dated: 08/03/2013

NOTICE INVITING QUOTATIONS

Sub: Electrospinning Unit

Sealed quotations in separate envelopes of technical and commercial bid kept in a one sealed outer envelop are invited for purchase of a **Electrospinning Unit** as per specifications given below. Your sealed quotation should reach latest by 5 PM on 21 March, 2013 to **HOD, Department of Chemical Engineering, Indian Institute of Technology – Delhi (IIT Delhi), Hauz Khas, New Delhi - 110016**. Your quotation should be superscribed “**Quotation for Electrospinning Unit**”.

Minimum Specifications: Electrospinning Unit

S. No.	Specification	Essential requirement
1.	Vertical and horizontal system	<ul style="list-style-type: none"> • Electrospinning unit should be vertical and horizontal
2.	Power Supply	<ul style="list-style-type: none"> • Voltage in the range of 0-50 kV • Output Current less than 1mA • Voltage output continuously adjustable from zero to maximum output • Manual or software based control system • Manually or software based variable voltage and digital display power meter for current and voltage monitoring • Overload trip: unit shut down if current exceeds 20% of the maximum output current • Adequate protection if sparking occurs between two electrodes
3.	Syringe pump	<ul style="list-style-type: none"> • Compatible to work under high voltage • Compatible to dispense from standard disposable syringes of volume from 2 mL to 20 mL • Controllable feed rate in the range of 0.1 μL/min to 10 mL/min • Highly precised operation • Infusion/withdrawal pumping system • Volume and Time control
4.	Spinneret	<ul style="list-style-type: none"> • Provision for core shell fibre fabrication • High throughput fibre fabrication • Should include <ul style="list-style-type: none"> ➤ Co-axial nozzle ➤ Multi-nozzle ➤ Single nozzle ➤ Cross-nozzle
5.	Collectors	<ul style="list-style-type: none"> • Plate collector: material compatible to work under high voltage. dimensions 15 x 15 cm or larger

		<ul style="list-style-type: none"> • Drum collector: material compatible to work under high voltage, drum length 10 cm or more, drum diameter 4 cm or more, rotation speed minimum range 100 - 3000rpm • Disk collector (optional): material compatible to work under high voltage. diameter: 0.75cm or higher
6.	Linear stage	<ul style="list-style-type: none"> • Controlled height adjustment between syringe pump and collector • X-axis motion • Y-axis motion • Z-axis motion (optional)
7.	Spinning chamber	<ul style="list-style-type: none"> • Compatible high quality material with best insulation • Front doors made of chemical resistant glass or a compatible material • Humidity control and display meter • Temperature control • Exhaust fan • Glass window to view real time spinning operation • Inert gas purging facility (optional)
8.	Safety	<ul style="list-style-type: none"> • HV power supply should switch off automatically when door is opened • Should include a switch to remove static electricity • Power light • Main emergency stop button • Earth terminal
9.	Software	<ul style="list-style-type: none"> • Compatible software to run the instrument for: operation of syringe pump, varying processing parameters and any other apparatus operation requirement

Terms & Conditions:

1. The quotations must have validity of at least three months.
2. Price must include insurance and freight charge, free installation and demonstration. Delivery period of the item should be within 6-8 weeks from the date of PO. Shipment to be sent to Department of Chemical Engineering, Indian Institute of Technology Delhi, New Delhi - 110016
3. The products will be used for educational purposes. Any applicable academic institution discounts should be offered and stated.
4. Detailed Brochures should accompany the offer.
5. If the bidder is an authorized dealer then the authorized Indian dealership certificate from the principles should be enclosed.
6. 2 years warranty desirable.
7. Payment will be after delivery.
8. In case the items are proprietary products of the company, a proprietary item certificate stating the same must be provided.
9. Training should be provided free of cost.
10. List of End user should be provided.
11. Institute reserves the right to accept or reject any or all the quotations without assigning reasons thereof.

Chairman PFC