CENTRE FOR POLYMER SCIENCE AND ENGINEERING

INDIAN INSTITUTE OF TECHNOLOGY - DELHI

HAUZ KHAS, NEW DELHI - 110016

16.01.2013

NOTICE INVITING QUOTATIONS

Sealed quotations in separate envelopes of technical and commercial bids kept in a sealed outer envelope are invited for purchase of a *Microwave Synthesis Reactor* as per specifications given below. Your sealed quotations should reach latest by 3 pm on Friday, 8th February, 2013 to **Prof. Veena Choudhary, Centre for Polymer Science and Engineering, Indian Institute of Technology – Delhi (IIT Delhi), Hauz Khas, New Delhi-110016.** Your quotation should be superscribed "Quotation for Microwave Reactor due on "8-02-2013".

General Specifications for Microwave Synthesis Reactor

- 1. Microwave heating system must have a measured minimum focused power output of 300 watts or more, system should be monomode and must be capable of conducting pressurized as well as normal pressure reaction in the same system
- 2. System must have a built in operating system with fluorescent Display with easy to program operating parameters. System must operate stand alone as well as through PC, suitable software should be offered as a main supply.
- 3. System software must automatically adjust the power delivery based upon sample Load and pre-programmed control settings.
- 4. Capability for a maximum operating temperature of 300 °C or higher and a maximum operating pressure of 30 bar or higher.
- 5. System should have in built magnetic stirring facility with a maximum stirring speed of 1200 rpm or higher as well as standard cooling facility to be provided.
- 6. Capability for simultaneous in-situ temperature monitoring.
- 7. Pressurize vessels which are of vent & reseal technology and of varying capacity should be given. Vial capacity should be atleast 30 mL or better and suitable magnetic stirring bars for each vial type, re-usable septa and caps should be supplied.
- 8.MOC of vial: Standard borosilicate glass applicable for routine applications and optional vials made of corrosion resistant material Silicon Carbide applicable for fast & efficient heating of reactions involving metal catalysts, fluorination with HF, non-polar solvents or other corrosive chemicals. The vials shall be with easy and tool-less sealing.
- 9. System should have facility to clean cavity in case of spillage.

Terms & Conditions:

- 1. The quotations must have validity of at least three months.
- 2. Quotation to be made on Freight on Board (FOB), New Delhi.

- 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. Warranty for a period of 3 years.
- 7. Payment will be through irrevocable letter of Credit.
- 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 users should be provided.
- 11. Institute reserves the right to accept or reject any or all the quotations without assigning reasons thereof.