

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

Dated: 1st March 2012

NOTICE INVITING QUOTATIONS

Sub: Purchase of Focused Monomode Microwave Synthesis System

Sealed quotations in *separate envelop of technical and commercial bid* kept in one sealed outer envelope are invited for purchase of Focused Monomode Microwave Synthesis System as per the specifications given below. Your sealed quotation should reach latest by 5 PM on 16th March 2012 to **Dr. Nidhi Jain, Department of Chemistry, Indian Institute of Technology – Delhi (IIT Delhi), Hauz Khas, New Delhi - 110016**. Your quotation should be superscribed “**Purchase of Focused Monomode Microwave Synthesis System** due on 16th March 2012”.

SPECIFICATIONS FOR FOCUSED MONOMODE MICROWAVE SYNTHESIS SYSTEM

1. System Specifications:-

Magnetron Frequency: 2450 MHz

Pressure: Monitor 0-35 Bar, control 0-20 Bar

Temperature: -90 Deg. To 300 Deg. C control range

2. Support synthesis of compounds in a sealed vial for volumes of upto 10ml and under atmospheric conditions in flasks upto 125ml with reflux facility.
3. Single mode microwave applicator design which provides a uniform field with a high power output of 300 watts.
4. Power delivery system that automatically adjusts during the synthesis procedure for changes in the polar and/ or ionic properties of the reaction mixture.
5. Cooling capability to quench reactions at the end of the synthesis from -80 to +35 Deg.C.
6. In-Situ stirring system to affect the stirring of the reaction.
7. Non-invasive IR sensor for Temperature Measurement.
8. Allow the user to change all operating procedures in the midst of the run.

9. Ability for pressure measurement and feedback control. It must use a vent and re-seal technology that allows for safe venting for excessive pressure. The vial sealing system should provide a high pressure seal [>20 Bar (300psi)]
10. Automatic and safe relief of residual pressure, ability to normalize the reaction vial immediately after the reaction procedure concludes.
11. Removable, protective liner to handle spills in the cavity.
12. System must be quoted with accessories to perform sub ambient (upto -80 Deg.C). The system should be upgradable to hydrogenation reaction with gas addition kit.

TERMS AND CONDITIONS:

1. The quotations must have validity of at least three months.
2. Quotations must include insurance and air-freight charges, delivery period of the items addresses to "The Indian Institute of Technology, Delhi, India (CIF, New Delhi)." Rate should be inclusive of installation and training.
3. The products will be used for educational purposes. Any applicable academic institution discounts should be offered and state. Detailed brochures should accompany the offer.
4. If the bidder is an authorized dealer then the authorized Indian dealership certificate from the principles should be enclosed.
5. Please indicate the warranty for the system.
6. In case the items are proprietary products of the company, a proprietary item certificate stating the same must be provided.
7. Financial bid will be opened, those who meet the technical specifications.
8. Institute reserves the right to accept or reject any or all the quotations without assigning reasons thereof.