Technical and price bids are invited for the purchase of a Ultrasonic Homogenizer as per minimum specifications, terms and conditions given below.

Minimum Specifications for Ultrasonic Homogenizer:

- 1. The system should be able to deliver up to 300 Watts of ultrasonic power to the Titanium tip.
- 2. The system should include an integrated Sound Abating Chamber to decrease sound generated during processing.
- 3. The system should possess Timer and Duty Cycle function.
- 4. Technical specifications should include minimum Power Output of 0 300Watts, Output Frequency of 20 kHZ, Automatic Tuning, 10 - 90% Pulsing, Timer or more.
- 5. The system should include Ultrasonic Generator, Transducer, Transducer Post, Transducer Clamp, Pin Wrenches (pair) as per specifications given below:
 - About 3.5-4.0 mm Diameter Stepped Titanium Micro Tip for processing volume300 μl - 15 ml.
 - About 9.0 -10.0 mm Diameter Solid Titanium Tip for processing volume of 5 ml 200 ml.
 - About 12.5mm Diameter Flat Titanium Tip.
 - Titanium Cup Tip, 250 ml with Tip Diameter of 1/2" for a processing volume of 250 ml.
 - Microtube Tray, 8 Position for 250 ml Cup Tip.
 - Continuous Flow Chamber for continuous processing of liquids. It may be equipped with a water flow-through cooling jacket to maintain steady temperature.
 - Pin Wrenches with 1.5" Diameter.
 - Interface Washers: 1.5" Diameter.
 - Transducer: 150/300 Watt Transducer.
- 6. Two years warranty for the system to be included in the proforma invoice

Terms & Conditions:

1. The quotations must have validity of at least three months.

2. Quotation must include insurance and air-freight charges, delivery period of the items addresses to The Indian Institute of Technology, Delhi, India(CIF, 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 details must be given.

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.

10. Institute reserves the right to accept or reject any or all the quotations without assigning reasons thereof.

It was decided to invite the quotation (CIF, New Delhi) for Fraction collector system with these specifications from various suppliers by putting on the IITD web site. The technical and price bids should be kept in separate sealed cover marked as "technical" and "price bids" on the top of the envelops. Both the envelops should be kept inside a bigger envelope marked as **Bids for Ultrasonic Homogenizer**. The bids should be sent to Dr. S.K.Khare, Chemistry Dept. IIT Delhi, Hauz-Khas, New Delhi-110016 latest by Sept. 23, 2011, 5 PM.

Prof. A. K. Singh (Chairman)

Dr. S.K. Khare (PI).