

Indian Institute of Technology, Delhi.
Department of Chemical Engineering

Date: 11-12-2015

Subject: N.I.Q. FOR PURCHASE OF PROBE TYPE SONICATOR.

Quotations are invited for the purchase of the probe type sonicator as per following specification. Quotation should reach in the office of Prof. K. K. Pant (Room No. 185, Block 2, Chemical Engineering Department, IIT Delhi, Hauz Khas, New Delhi-110016) on or before 04-01-2016 (Before 4 PM)

TECHNICAL SPECIFICATION FOR PROBE TYPE ULTRASONICATOR:

System should be **microprocessor based** programmable ultrasonic processor.

Processing volume: **200 micro-liters to liters.**

Power: **700** watts

Frequency: **20KHz.**

Full Amplitude (sonication intensity) Control: **1-100%**

Tuning: **Automatic tuning**

Programmability: Parameters including processing times, pulse on/off and amplitude can be saved to memory and run by the touch of a button, Run Multiple program in sequence.

Programmable timing: **72 hour processor time**

Adjustable pulser: **ON and OFF 1 sec to 24 hours.**

Overload protection, quick disconnect converter cable.

Total Energy (in joules) output display: A Large colour LCD Touch Screen should display all operating parameters just with touch button.

Dimensions: 8 inch W * 16 inch L * 8.5 inch H

Voltage: 110V, 50/60 Hz

Should be supplied with

- a) Sound abating enclosure
- b) Laboratory Jack
- c) Stand with converter clamp

The following terms and conditions should also be taken care of.

1. Separate sealed technical and sealed financial bids should be given in a single sealed envelope.
2. Validity of the quote should be at least 120 days.
3. A company profile should be included in the technical bid.
4. The profile should include the following at the minimum:
 - A. The parent company's base in India, its customer list.
 - B. The Indian agent's profile highlighting its past experience and the number of probe type sonicator sold in India.
 - C. The Indian agent's capabilities of their maintenance team in India.
5. In case the bid is a given through an agent, a valid agentship certificate should be attached.
6. If the item is a proprietary item, a proprietary certificate from the principal manufacturer should be included.
7. Essential accessories needed for functioning of the sonicator should be included in the quote and clearly specified. Optional accessories available may also be quoted separately.
8. If some specifications are not being met, deviations may be clearly stated. In the unlikely event that none of the vendors are able to meet all the specifications, the committee reserves the right to waive or relax any of the requirements at the technical evaluation stage.
9. Training of Personnel: The supplier shall be required to undertake to provide the technical training to the personnel involved in the use of the equipment at the Institute premises, immediately after completing the installation of the equipment for a minimum period of one week at the supplier's cost.
10. Institute makes payment after delivery and successful installation. In case the payment terms are different, it should be mentioned clearly. If equipment is to be

imported, the address of the company in whose name the LC is to be opened should be stated. Payment will be made through wire transfer after successful installation.

11. The Quotation received after due date will not be considered.

12. The Institute reserves the right to reject any quotation without assigning any reasons. After opening the technical bids, a demonstration of the product may be sought in IIT. The committees will shortlist the bids based on an evaluation of the technical bid, the demo, the efficiency / efficacy / ease of use / ability to maintain and other aspects of the equipment vis-à-vis the requirements. Financial bid would be opened only for the shortlisted companies.

13. **Warranty:** Warranty period shall be 36 months from date of installation of Goods at the IITD site of installation.