



Indian Institute of Technology Kanpur

National Centre for Flexible Electronics

Enquiry number: SCDT/FLEXE/2017-18/03

Date: 13/04/2017

Opening Date: 13/04/2017

Closing Date: 24/04/2017

Subject: Purchase of Probe Sonicator.

Quotations from prospective vendors are invited by National Centre for Flexible Electronics, IIT Kanpur for **Probe Sonicator**

Note: **The technical and financial bid should be submitted together in separately sealed envelopes.**

We are looking for a **Probe Sonicator** must have following minimum technical specifications.

Technical specifications for PROBE SONICATOR

We are looking for powerful probe ultrasonicator for sonicating liquid with possible application of emulsion preparation, homogenization, dispersion and de agglomeration of nanoparticles, grinding of nano materials, extraction and sonochemistry. sonocatalysis, boost of chemical and catalytic reaction. The probe sonicator must have the following technical specifications;

1. Compact all-in-one design with processing capability to run 24x7.
2. Dry run protection
3. Capacity of probe ultrasonicator to handle sample volume from 1ml to 4000ml
4. Power should be 400W or better
5. Frequency 24kHz with 85% energy efficiency or better
6. Amplitude adjustment 20-100%
7. Pulse adjustment from 0-100%
8. Probe should be made of titanium Ti6Al4V. Diameter 3mm (1-100ml sample), 22mm (100-4000ml samples). Length of all the sonotrode should be 100mm at least. Provision of SS or glass flow cell with double jacket for temperature control for continuous process
9. Sample temperature indicator
10. System: color touch panel display, inbuilt software, Browser based PC-control, with programable features for temperature probe, timer, energy level, pressure(PS7-kit)
11. Provision of process data recording on SD-Card
12. CE Certified and IP41 grade
13. System should be provided with heavy metal stand

Terms and Conditions:

1. **Supplier/Vendors should submit technical and financial bids together in separately sealed envelopes.**
2. Supplier who has supplied at least 5-6 similar **DIGITAL SONIFIER** in the national and international institutions in last two years will be preferred.
3. Financial bid will be open only for those, who meet tender technical specification.
4. **Please do mention tender number clearly on envelop.**
5. Please send the name and contact details of the person to whom company had supplied a similar systems. Committee may ask for the feedback.
6. The supplier must have supplied systems to institutions of national and/or international repute.
7. Quotation must indicate FOB prices.
8. Payment terms & condition is 70% against delivery, 20% after installation and 10% after successful running of equipment for 3 months & approval.
9. Warranty/Guarantee should be clearly mentioned. The Warranty must start from the date of installation at IITK.
10. Installation, demonstration, and training-sessions at IIT Kanpur will have to be provided by the manufacturer or the vendor for the quoted system.
11. Quotation should carry proper certifications like proprietary certificate, authorization certificate from manufacturer, etc.
12. Validity of quotation should be at least for 60 days.
13. Maximum educational discounts should be applied.
14. Institute is exempted for partial custom duty (CD applicable to IIT Kanpur is 5.15%).
15. Institute is exempted from payment of Excise Duty under notification No. 10/97.
16. The delivery period should be specifically stated. Earlier delivery may be preferred.
17. The indenter reserves the right to withhold placement of final order. The right to reject all or any of the quotations and to split up the requirements or relax any or all of the above conditions without assigning any reason is reserved.

Kindly send the quotation in sealed envelopes latest by dated 24/04/2017 to the following address:

**To,
Dr Ashish,
Room No.310,
Samtel Centre for Display Technologies (SCDT), Indian Institute of Technology Kanpur,
Kanpur – 208016, Uttar Pradesh, India**