CENTRE FOR BIOMEDICAL ENGINEERING

INDIAN INSTITUTE OF TECHNOLOGY-DELHI

HAUZ KHAS, NEW DELHI-110 016.

Dated: 25.06.12

Notice Inviting quotations

Sealed quotations in **separate envelops of technical and commercial bid kept in one sealed outer envelope are invited for purchase of RF ablation unit (** 13.56MHz Signal Generator **) for biological applications** as per specifications given below. Your sealed quotation should reach latest by 5 P.M. on 18th July 2112 to the Head, Centre for Biomedical Engineering, Indian Institute of Technology, Delhi (IIT Delhi), Hauz Khas, New Delhi-110016 attention Dr. Veena Koul. Your quotation should be super-scribed **"Quotation for purchase of RF ablation unit (13.56MHz Signal Generator).**

Design,fabrication and integration of RF generator and other accessories to be carried out on site as per the specifications noted below

A) Technical Specifications for 13.56 MHz Signal Generator .

1. Frequency- 13.56MHz
2. Frequency Stability- ±5PPM
3. Peak Output Power- 1KW
4. Duty Cycle- up to 80%
5. Pulse Width- variable (minimum 100µsec)
6. Output Power Selection- from 100W to 1000W
7. Controls- System ON/OFF, RF power ON/OFF, RF output power selection, Tuning,
8. Display- 4 × 40 LCD with control

   Display Parameters- RF output power level, RF in mode display, PA Chassis temperature, Amplifiers currents, alarms and warnings
9. Primary Input Power- 230VAC ± 10%, 50 Hz Single phase
10. Inside shielding with RF absorber for preventing RF energy leak

B) RF chamber

The size of RF chamber should be approximately 60 cm x 60 cm x 60 cm size. The electromagnetic fields from the signal generator should be coupled to an applicator/cavity (where the samples size - 96 well culture plate to be exposed) with a suitable arrangement of transmitting (Tx) and receiving (Rx) heads. The temperature inside the applicator should be uniform and should reach a maximum of 70deg Celsius. The spacing between Tx and Rx heads should be adjustable .

C) **Automatic Tuner**.

2. Facility for inserting Fiber optic temperature probe and temperature monitoring

3. Interlock for preventing accidents.

Terms & Conditions:

1. Quotations should be placed in **separate envelops of technical and commercial bid, kept in sealed outer envelope.**
2. The quotations must have validity of at least three months.
3. Quotation must include insurance and air-freight charges, delivery period of the items addresses to The Indian Institute of Technology, Delhi, India (FOB, New Delhi).
4. The products will be used for educational purposes. Any applicable academic institution discounts should be offered and stated.
5. Detailed Brochures should accompany the offer.
6. If the bidder is an authorized dealer then the authorized Indian dealership certificate from the principles should be enclosed.
7. warranty must be provided
8. Payment will be through LC/DD/TT.
9. In case the items are proprietary products of the company, a proprietary item certificate stating the same must be provided.
10. Training should be provided.
11. Institute reserves the right to accept or reject any or all the quotations without assigning reasons thereof.
12. Details of User List with phone number and email ID should be provided.