

## Request for Quotation

**Enq. No.: ACMS/ AU/ 2012-13/ FB-1**

**Sub :** Quotation for supply of **FUSION BEAD MACHINE** required to prepare fusion beads as mentioned below.

With reference to the subject mentioned above, you are invited to submit the quotation in a sealed cover in order to reach us before **March 21st, 2013** in the form of a hard copy and soft copy to the address mentioned below.

The prospective suppliers are required to send quotation in two parts in sealed envelopes, as "Technical Bid" and "Financial Bid". The Technical Bid should contain detailed technical specification of the product being offered and should not mention any prices. The Financial Bid should include the detailed price quotation clearly including the cost of the equipment, taxes, service charges if any, shipping and handling charges. The two separate and sealed envelopes should be clearly marked appropriately as "Technical Bid" and "Financial Bid".

### **Terms and Conditions:**

1. Maximum education discount, if any should be offered
2. Validity of quotation should be at least for 60 days
3. Prices should be on CIF and FOB separately (if imported)
4. Prices should include the installation and training cost
5. **Warranty should be for at least three years after installation**
6. Normal payment terms for the Institute will be applicable (90% on delivery of the items and the remaining 10% after satisfactory installation/ inspection)
7. Quotation should carry proper certifications like agency certificate, proprietary certificate, etc.
8. Delivery should be made within 9 months

The soft copy of the model quotation can also be downloaded from our website at <http://www.iitk.ac.in/infocell/tender/tendernotice.htm>

Kindly send the quotation in sealed envelopes latest by 21stMarch 2013 to:

**Dr. AnishUpadhyaya**  
**Head, Advanced Center for Materials Sciences**  
**IIT Kanpur, U.P. 208016, India.**  
**e-mail: anishu@iitk.ac.in**

Technical specification for FUSION BEAD MACHINE

1. Gas: Propane or LPG without the requirement for compressed air and oxygen
2. Power : Machine should be operated on available power supply i.e. 220 VAC/50 Hz
3. Burner: 3 Burners

Heating characteristics

- a) One burner per sample
- b) Automatic gas /burner calibration
- c) Works with LPG
- d) 3 samples prepared per cycle
4. Programmable parameters:
  - a) Gas flow
  - b) Rotation speed
  - c) Time in each step
  - d) Crucible angle
  - e) Cooling air flow
5. Mixing:
  - a) Optimal agitation by rotation on an inclined axis
  - b) Flexible and programmable inclination adjustment
6. Cooling:
  - a) Automatic cooling of the mold
  - b) Five (5) programmable cooling steps (air flow and time)
7. Software / Hardware:
  - a) Fully automatic
  - b) Automatic ignition
  - c) Flame watching system and auto shut off valve
  - d) Can create, store and recall methods
  - e) Unlimited program storage in the software
  - f) PC-link software and interface
  - g) Operates free of supervision
8. Flux

- a) Lithium tetraborate/metaborate, non wetting agent and oxidiser.
  - b) Quantity of flux
9. Crucibles & moulds and beakers for liquids:
- a) Quote platinum/gold crucibles of 25 ml, 30g weight
  - b) Quote 40 mm moulds of 48 g weight
10. Mixer: Sample and flux mixing is needed before starting the fusion. So quote suitable mixer.
11. Ultrasonicator Bath: Please quote suitable ultrasonicator bath for cleaning the crucible and moulds from indigenous sources.
12. Vendors to quote compatible PC and printer
13. Vendors also quote compatible exhaust/hood for fusion bead machine
14. Warranty: The instrument should be in warranty for 12 months from the date of installation.
15. Vendor to quote for essential spares and consumables for smooth operation of the instrument.