Indian Institute of Technology - Kanpur Department of Biological Sciences & Bioengineering

Enquiry Number: : IITK/BSBE/2016-17/AK/NC 02, Dated: 01-08-2016

Sub.: Inquiry for the supply of: "Furnace of capacity 1200 °C"

Opening date: August 1, 2016 at 3:00 PM Closing date: August 8, 2016 at 5:00 PM

Sealed quotes are invited for the above mentioned laboratory products as per the specifications given in the next page.

Your quote should mention/include the following:

- Maximum discount if any should be offered and mentioned.
- Quoted price should include the cost for installation, warranty and required accessories (see below).
- Validity of the quote at least for 60 days.
- FOB (indicating port of shipment) and CIF (New Delhi) values should be quoted separately if import is required. For quotes in INR, the price quote should be for delivery at Kanpur.
- The quote should cover insurance for transport up to Kanpur.
- Indian agency commission if applicable (should be certified by the principal if no agency commission is applicable) in case of import.
- Authorization certificate from the principal if you are a local agent.
- Terms and conditions for the payment, including the banker's name of the principal and the account number, if any, for electronic transfer.
- Include proprietary item certificate if applicable.
- Technical literature to support your product

Note: Offers should quote for all components of this facility (see next page for details). Quotes that do not offer all components will be disqualified.

Dr. Ashok Kumar Department of Biological Sciences & Bioengineering Indian Institute of Technology – Kanpur

Furnace of capacity 1200 °C must possess the following specifications:

Laboratory Filter Sintering Furnace

Built up: Rigidly built up with mild steel sheet casing supported on Mild steel Angle Iron frame duly powder coated outer body. Mounted on a Heavy Duty Angle Iron Stand

Controls: With Digital Microprocessor based PID Automatic Temp. Programmer.

Microprocessor based auto tuned dual digital display PID temperature programmer having 2 programs of 8 step each thus having 16 steps. Mains MCB Switch, Indicator lights, Voltmeter, Ammeter PID Programmer, SSR

Heating Element: Preferably Silicon Carbide Heating Elements.

Working Temperature: 1200 °C continuous for at least 48 Hrs.

Insulation: Thick insulation of ceramic fibre blanket should be provided.

Skin Temperature:Same as ambient temperature.

Chamber Size: 300mmHx300mmDx400mmW.

Fume Hood: There should be provision for discharge for harmful fumes out of the Furnace chamber to open environment.

Element Safety: There should be provision to safe guard elements from harmful fumes. Elements should not fuse due to fumes.

Provision should be made for uniform heating from all sides.

Gas ventilation is provided at the back of furnace for easy removal of gas during process.

Power Supply: 3 phase 440 V AC Three phase Power supply.