

Tender Notification for the procurement of an “Automatic cryo-plunger at the Indian Institute of Science, Bangalore”

Dear Sir/Madam,

30/01/2017

Subject: Request for quotation for cryo-plunger

This is a request for a quotation for procurement of an “automatic cryo-plunger” on C.I.P. Bangalore basis. Your quotation should clearly indicate the terms and conditions of the quotations, delivery, delivery schedule, entry tax, payment terms, warranty coverage etc. The quotation should be submitted in two parts: Part I (Technical bid) and Part II (Commercial bid) and both should be submitted in a sealed envelope. Technical bid should be exactly same as commercial bid except that prices are not shown in technical bid. Technical bid should have item wise compliance report of all specifications.

The commercial bid should have pricing for each of the items quoted in the technical bid. Prices quoted should be inclusive of all taxes / duties. The prices quoted should be inclusive of delivery of the items to the site and installation at site and should include both rupee and US dollar quotes. The last day for submitting the bid is **March 1, 2017**. The offer should be valid for a period of at least 60 days from the last date for submission of quotes.

1. Specifications for Vitrification Device (cryo-plunger) for cryo-EM sample preparation – Qty 1 No.

- a. Vitrification system should be fully automated for vitrification (rapid cooling) of aqueous samples.
- b. The process of plunging, blotting and vitrification should be fully automated upon placing a vial in the chamber and setting up the liquid coolant container.
- c. Operational parameters should be reproducible and the result enabling a high throughput of vitrified samples, with an easy and straightforward control of the vitrification process.
- d. The parameters to be influenced should be temperature, humidity, the number of blotting and a number of critical time settings.
- e. The device must be able to control the temperature -60°C to 4°C (at an ambient temperature range up to 25°C) Peltier controlled heating/cooling.

- f. The device should be optimized for operation at least 95% RH (no condensation at $RH < 85\%$), ultrasonically controlled humidification.
- g. Device should have the plunge speed at least 1.7(m/s) or better.
- h. Vitrification system with controlled environmental chamber, integrated display and printed manual.
- i. Experimental conditions should be saved which can be retrieved later on for specific samples.
- j. Multiple blotting should be possible so that viscous samples can also be prepared.
- k. Machine should have double blotting pads in which blotting force can be modified.

2. Starter consumable kits:

- a. Starting kits including holey carbon grids (quantifoil), cryo gloves etc for preliminary training and testing purposes.
- b. Supply of ethane cylinder with regulator (99.9990% purity ethane, 5 kg or more).
- c. Tools for plunging apparatus, tweezers (no. 5 nonmagnetic, and large), screw driver etc., compatible grid boxes.
- d. Bidder should provide some accessories (at least one set cryo tweezers, cryogenic container) extra.
- e. Bidder should provide the free service if there is a routine up gradation or software installation is required.

Installation: The machine along with accessories should be installed in MBU, IISc and made fully functional by the company or through its authorized agents. The machine acceptance will involve trouble free operation and demonstration of the capability of the system for which necessary consumables to be supplied along with the system.

System maintenance: Bidder should provide the free service if there is a routine upgradation or software installation is required. It is also preferable that providing company/bidder should take care of the proper servicing of the instrument on a time-to-time basis.

Important: Please note that systems with proven record for usage in cryo-electron microscopy labs in India are desirable. Provide the users list (Worldwide and in India) and the Service and Application support structure in India (Bangalore).

The documents may be addressed to the Chairman Molecular Biophysics Unit (Kind attention: Dr. Somnath Dutta), Indian Institute of Science, Bangalore 560 012. **Last date for receiving queries: February 22, 2017. Please email somnath@mbu.iisc.ernet.in. The last date for submission of bids is March 1, 2017.**

Thank You,
Sincerely,



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(On behalf of the purchase committee)