Institute for Stem Cell Biology and Regenerative Medicine Autonomous institute of the Department of Biotechnology, Government Of India



INS/L-5962/2018-2019(Y)

Date: 03/01/2019

ENQUIRY

Dear Sirs.

Please let us have your lowest Quotation for the following:

| SL No | Cat. No | Item Description | Make/Model | Item Qty | UOM |
|-------|---------|--|------------|----------|-----|
| 1 | | BIO X 3D BIOPRINTER (Specification Attached) | | 1.00 | No. |
| | | | | | |

Remarks: The Price quoted against this RFQ should be extended to Bangalore Life Science Cluster (BLiSc) of NCBS, InStem and C-CAMP for placing repeat order as per norms, by any one or all institutes of Bangalore Life Science Cluster (BLiSc)

NOTE: **inStem is a public funded research institute and is entitled to concessional rate of GST @ 5% for items supplied for research purpose. The offer should be submitted after fully considering the above notification. **

The Tenders to be quoted in foreign currencies & any other currencies approved/traded by RBI -USD/Euro/JPY/GBP/SGD/CAD/INR.

- 1. The bids shall be enclosed in an envelope, and due date sealed duly marked "Tender for " Ref No: . The bids should be addressed and to be mailed to "THE HEAD-PURCHASE". The bids are liable to be rejected if the sealed envelope is not addressed to "THE HEAD-PURCHASE" with Tender Ref No and Item Description and due date. The bids delivered in person shall be dropped in Purchase Section. If the bids are sent through courier or mail, it should reach by submission Date and Time and inStem will not be responsible for the delay.
- 2. DUE DATE FOR SUBMISSION OF QUOTATION AGAINST THIS ENQUIRY IS 10/01/2019 till 5.30 p.m.
- 3. OUOTATIONS RECEIVED AFTER THE DUE DATE SHALL BE REJECTED.
- 4. The Validity of your quotation should be for 60 days from the date.
- 5.All duties, taxes, surcharge and cess as currently applicable must be sated in your quotation, separately. Otherwise your quote is liable to be rejected.
- 6. Your quotation should indicate delivery period & Warranty period.
- 7. Delivery to be made to our Stores. Please indicate charges, if any extra. Transit Insurance should be done up to inStem Stores.
- 8. If you are unable to supply the quality, specifications or brand as mentioned in our enquiry, please state so and then offer alternative to quality/Specifications.
- 9. Payment: within one month after delivery & acceptance/satisfactory installation.
- 10.Please ensure that the enquiry number and the due date is super scribed on the envelope failing which your quotation is liable to be rejected.
- 11. Since we are a public funded research institution, we are exempted from paying Customs Duty (Except advolerum duty of 5% + 2% cess and CVD @4% vide Notification No.51/96 with latest amendments) and excise duty vide Notification No.10/97 CENTRAL EXCISE dated 01-03-1997 for all scientific equipment, technical instruments, equipment (including computers), their accessories, spares, consumables and software. Hence, please offer your prices taking this option into consideration.

If the items as per specifications in our P.O. is not supplied (shipped) within the specified delivery schedule, then liquidated damages (not in terms of penal-ty) will be imposed automatically and shall be deducted from the bill at the rate of 0.5% per week subject to a maximum of 10% of the order value.

Institute for Stem Cell Biology and Regenerative Medicine

Autonomous institute of the Department of Biotechnology, Government Of India



Ref: INS/L-5962/2018-2019(Y)

Date: 03/01/2019

12.If the item is covered under DGS&D rate contract, please quote the rate as per the DGS&D rate contract with Xerox copy of the DGS&D order.

13.Any dispute or differences that may arise between the parties shall be referred to the sole arbitration of the Centre Director or his nominees. The decision of the arbitrator shall be final and binding on the parties. The venue for arbitration shall be Bangalore. The provisions of the Arbitration and Conciliation Act,1996 as amended from time to time shall apply. The Courts in Bangalore shall have exclusive jurisdiction to deal with any or all disputes between the parties.

Yours faithfully
For and on behalf of Institute for Stem Cell
Biology and Regenerative Medicine

Yesu R

GKVK, Bellary Road, Bangalore-560065,INDIA

Phone No. : Email Id: 91-80-23666343/344/345/346 purchase@ncbs.res.in Fax:

91-80-23636662

Website:

www.ncbs.res.in



Institute for Stem Cell Biology and Regenerative Medicine

Technical Specifications for 3D Polymer Extrusion Printer

- 1) Bench top, Portable, Pneumatic Extrusion, Thermoplastic Extrusion and Ink-jet Extrusion based 3D bio printing system.
- 2) Printer should have multiple print heads for simultaneous printing of 3 or more materials.
- 3) Printer should be bench top design to be used inside the cGMP laminar hood with dimensions range of $400-450 \times 300-360 \times 450-500$ mm. Printer should have build volume for $105-125 \times 75-95 \times 55-75$ mm.
- 4) Should have patented and a built-in HEPA14 filter and air fan system for ensuring build chamber is clean.
- 5) Printer should have layer resolution in the range of <2 μm.
- 6) Printer should have high positioning precision of 1 µm.
- 7) Should have equipped facility for using wide range of hydrogels and bio-inks with viscosity ranging from 0.001 to 400Pa.S.
- 8) Printer should have internal air compressor, and also be compatible with external air pumps.
- 9) Should have pressure range set from 0.0005 to 7 bars
- 10) Should have print bed with temperature controlling unit in the range of 5-60 deg C.
- 11) Should have at least two UV curing facilities to use vast range of hydrogels and customizable with wavelengths from 350 to 450 nm
- 12) Should have intelligent Print heads, easily swappable with temperature control unit (heating or cooling) in the range of 4-60 deg C, syringe pump heads and thermoplastic heads upto 250 deg C, inkjet head, HD cameras, photo curing heads, etc.
- 13) Should have flexibility with range of Luer Lock compatible needles and tips. Machine should come with 22G, 25G, and 27G luer lock tips.
- 14) Should have a 275 nm uv light for ensuring chamber sterility and an automatic sterilization cycle.
- 15) Should have 7-10inch touch screen display for easy reading & display of temperature & pressure parameters.
- 16) Should have ethernet based software to connect the machine to a PC.
- 17) Power Requirements: 24 V DC @ 6-8 amps
- 18) AC input: 100 240 V, ~2 amps, 50 60 Hz
- 19) Operating voltage 230V, 60 Hz
- 20) Should be equipped with micro-stepping stepper motor technology and capable of stand-alone operation.
- 21) Chamber should be designed as per ASME standards/ PED directives 97/23EEC & should also comply with ISO 9001:2008.
- 22) Should be made from wear-resistant high grade material
- 20) Should not exceed >25 kg in weight
- 23) Must support file types with extensions .stl, .obj
- 24) Should include software to convert. DICOM files to. STL file.



- 25) Should have in built Software Bundle: Repetier Host, Slic3r, for converting patient data.
- 26) Provided with advanced USB OTG port for connecting and reading from external memory device.
- 27) Should be provided with operating & service manual.
- 28) Should be provided with 3 years of warranty.
- 29) Tender will be accepted only after intensive demonstration of similar quoted model.
- 30) Accessories of 3D Bio printer should be included.

