

## **Rachit Agarwal** Assistant Professor

Indian Institute of Science, Bengaluru - 560012

Centre for BioSystems Science and Engineering

## **रचित अग्रवाल** जैवप्रणाली विज्ञान तथा अभियांत्रिकी केन्द्र सहायक प्रोफ़ेसर भारतीय विज्ञान संस्थान, बेंगलुरु - 560012



## To Whom It May Concern

12-10-2021

This is Request For Quote (RFQ) from domestic (India based) manufacturers for the supply of a Microfluidic controller for cell culture, as part of a tender for the Centre for BioSystems Science and Engineering at the Indian Institute of Science, Bangalore. This is a **domestic tender** and bidders applying for this tender has to meet the requirements of the GOI notification No. P-45021/2/2017-PP (BE-II) dated 16<sup>th</sup> September 2020. Quote should come only from Indian Original Equipment Manufacturer (OEM) or their Indian authorized distributor.

## Procedure:

1. Please submit hard-copy of the proposal to the address below:

Rachit Agarwal
Assistant Professor
Centre for BioSystems Science and Engineering
3rd Floor, Biological Sciences Building
Indian Institute of Science
C V Raman Road, Yeshwanthpur
Bengaluru – 560012

Email: rachit(at)iisc(dot)ac(dot)in

- 2. The deadline for submission of proposals is Friday, 12 November 2021, by 5 pm
- 3. All documentations in the tender should be in English.
- 4. Tender should be submitted in two envelops (two bid system):

A. Technical Bid (Part-A) – The technical proposal should contain a compliance table besides the technical specifications listed in the description section below

The compliance table should include all the items and in the same order. The first column should describe your compliance in a "Yes" or "No" response. If "No" the second column should state the extent of deviation. The "third" column should state the reasons for the deviation if any. The fourth column can be used to compare your solution with that of your competitors or provide details as requested in the technical requirements table below. Suppliers who include any indication of prices in the technical bid will be automatically disqualified.

B. Commercial Bid (Part-B) – Commercial bid indicating item wise price breakdown for the items mentioned in the technical bid, as per the format provided in tender, and other commercial terms and conditions.

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	Description	Specifications		
1.	Microfluidic controller for cell culture	Allow live mammalian, bacterial and yeast cell imaging under microfluidics		
Basic Technical Specifications				
2.	Compatibility	Should be compatible with any open inverted microscope		
3.	Controls	System should allow perfusion flow control via pneumatic pressure above liquid wells.		
4.	Controls	Should provide control of sample temperature (Room temperature to $40^{\circ}$ C $\pm$ 1 °C), gas levels, humidity, pH etc.		

5.	Controls	Gas input requirement should be Clean, dry, premixed gas mixtures containing air, CO <sub>2</sub> , N <sub>2</sub> , and oxygen (up to 25%), regulated to between 100 kPa and 700 kPa (15 psi and 100 psi)
6.	Controls	System should allow long-term dynamic culture - Up to 10 days undisturbed
7.	Controls	Flow rates should be tunable in a wide range $10\text{-}50\mu\text{L/h}$ and should be able to provide continuous flow rate for a few days. There should also be a provision of bi-directional flow.
8.	Controls	Should have provision to flow multiple type of fluids in a single run in an automated manner
9.	Supplies	Should have ready to use chambers/plates that can be commercially purchased for mammalian, bacterial and yeast system
10.	Computer	A dedicated computer (64-bit, 8GB RAM, Windows 10 with 1TB hard Disk) must be provided for running the instrument
11.	UPS back-up	UPS or battery for at least 30 mins of use must be provided
12.	Software (part 1)	Software should control fluidics start-up and shutdown
13.	Software (part 2)	Software and system should record all data on flow rate, temperature, humidity and oxygen levels.
14.	Software (part 3)	System should accompany an automated and intuitive software for experimental planning and to control microenvironment
Cor	nmercial Terms and Cond	litions
15.	Customer base	Similar or Identical items must have been supplied to 2 laboratories in India. Please provide supporting documents for the same.
16.	Warranty & AMC	Minimum 1 + 2 years
17.	Support	Must have dedicated service and application support for this instrument. Please provide details of the number of trained personnel in India who will provide support
18.	References	Please provide names of two referees that are using this in India
19.	Incoterms	The quotations should be on FOR-IISc Bangalore basis in INR only.
20.	Breakdown addressing	Service call within 48 hours of complaint registration
21.	Documents	Please provide a copy of your GST and PAN and add provide the turnover value for the last 2 years.
22.	Turnover	The turnover for the last 2 years should be more than Rs. 50 lakhs. Please provide audited balance sheet.
23	Validity	Quote should be valid atleast for 90 days.

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