



**Request for Quotation (RFQ) for the supply of a Benchtop Bioreactor to the
CSIR**

RFQ No. 9070/24/11/2017

Date of issue:	Thursday, 09 November 2017
Closing Date and Time:	Friday, 24 November 2017 at 16h30 (Late tenders will not be considered)
RFQ Number:	9070/24/11/2017
Submission and Contact details:	For submission of quotations or any other enquiries: Email: tender@csir.co.za (Please use RFQ No. as subject reference)

1 INVITATION FOR QUOTATION

Quotations are hereby invited for the supply of a Benchtop Bioreactor to the CSIR.

2 QUOTATION REQUIREMENTS

The equipment sought, for which this RFQ refers is a compact and easy-to-use benchtop bioreactor with a full range of applications for microbial fermentation. The fully equipped culture vessel will have a compact footprint base unit with freely configurable pumps, pH and pO₂ sensors, fully automatic gas lines with mass flow controllers and a touch screen control unit.

The Bioreactor should meet the below listed specifications and features. Also, please indicate whether or not the equipment complies with the following requirements and note any non-compliance. As needed:

Item #	Description	Comply (yes/no)	Reference on quote submission
1	Compact footprint with dimensions of (W x D x H): 455 x 375 x 740 mm or smaller		
2	1.5 L Culture vessel		
3	Powerful direct drive of up to 1600 min-1		
4	Integrated mass flow controllers		
5	Four pumps with configurable operating modes (analogue and digital)		
6	Facility for gravimetric feeding (with external balance also to be supplied)		
7	Digital connection of pH and pO2 sensors		
8	Optical pO2 sensor		
9	Integrated touch screen operating unit		
10	Standard Parameters: Stirrer speed, temperature, pH, pO2, (anti-) foam, TotalFlow, GasMix, pumps		
11	Temperature: ≤ 20 °C (via chiller coolant) to ≥ 60 °C		
12	Real-time online biomass concentration measurement based on IR turbidity measurement from- 840 nm to 910 nm		
13	Balance for gravimetric feeding		
14	Recirculating Chiller with up to 9L/min max flow, min 660 Watt cooling capacity at 20 C		
15	Software for operation of bioprocesses (plan, control, analyse). Software to have remote operation capability		

Additional Requirements:

The appointed supplier will be required to:

- Supply, install/commission, and deliver to the CSIR Pretoria Campus
- Provide instructions and manuals, and
- Have a lead time of 4-6 weeks from date of Purchase Order. **Please indicate lead time on quote.**

Please include the following with your quote submission:

- Warranty information- **indicate on quote**,
- Applicable operations and maintenance costs per annum

NB: The supplier is required to submit product datasheets/brochures of the items they are quoting on and they must be clearly referenced on quotation

3 EVALUATION CRITERIA

- 3.1 Selection of suppliers will be based on the 80/20 preference point system.
- 3.2 Indicate valid B-BBEE status on quotation. No B-BBEE status will equal zero points. (RSA suppliers only)
- 3.3 Indicate CSD number (National Treasury Central Supplier Database) on quotation. If not registered yet on CSD, use www.csd.gov.za to register.
- 3.4 No order will be issued or no contract will be signed without a valid CSD number.

4 PRICING QUOTATION

- 4.1 Price needs to be provided in South African Rand (excl. VAT), with details on price elements that are subject to escalation and exchange rate fluctuations clearly indicated.
- 4.2 Price should include additional cost elements such as freight, insurance until acceptance, duty where applicable, etc.
- 4.3 Payment will be according to the CSIR Payment Terms and Conditions.

5 OTHER TERMS AND CONDITIONS

- 5.1 The supplier shall under no circumstances offer, promise or make any gift, payment, loan, reward, inducement, benefit or other advantage, which may be construed as being made to solicit any favour, to any CSIR employee or its representatives. Such an act shall constitute a material breach of the Agreement and the CSIR shall be entitled to terminate the Agreement forthwith, without prejudice to any of its rights.
- 5.2 A validity period of 90 days will apply to all quotations except where indicated differently on the quote.

- 6 No goods and/or services should be delivered to the CSIR without an official CSIR Purchase order. The CSIR purchase order number must be quoted on the invoice. Invoices without CSIR purchase order numbers will be returned to supplier.**

- 7 Note: This is not a Purchase Order.**