



## ***Request for Quotation (RFQ) for the supply and delivery of Flow Reactor Systems to the CSIR***

***RFQ No: 9329/26/11/2021***

Date of issue	Wednesday, 10 November 2021
Closing Date and Time	Friday, 26 November 2021 @ 16h30 (late submission will not be accepted)
Contact details	For submission of quotations or any other enquiries: Email <a href="mailto:tender@csir.co.za">tender@csir.co.za</a> ( <b><i>Please use RFQ No. as subject reference</i></b> )
CSIR Hours	08h00 – 16h30
Category	Capex purchase

## 1 INVITATION FOR QUOTATION

Quotations are hereby invited for the supply and delivery of three flow reactor systems and associated modules to the CSIR Pharmaceutical Technologies research group.

## 2 QUOTATION REQUIREMENTS

See full specification below:

Item	Detailed specification	Qty	Rate	Amount
1.	<p><b><i>Two-channel flow reactor system</i></b></p> <ul style="list-style-type: none"> <li>• Stainless steel or PTFE flow path</li> <li>• HPLC selector valves to allow the use of bottled reagent reservoirs or injection loops</li> <li>• Three-way valves to allow selection between reagent and solvent lines or waste and collection lines</li> <li>• <i>Pumps:</i> HPLC or Peristaltic or Syringe</li> <li>• <i>Pumping rate range:</i> 0.05 mL/min to 50 mL/min per pump</li> <li>• Pump pressure sensors</li> <li>• System pressure sensor</li> <li>• Back pressure regulators for pump and system to 15 bar</li> <li>• Automated control interface with touchscreen/PC/laptop and software included</li> </ul> <p><i>Quotations only requested from original equipment manufacturers (OEMs) or authorized distributors (confirmation to be included in application).</i></p>	2		

2.	<p><b>Three-channel photochemical flow reactor system</b></p> <p><i>Base unit:</i></p> <ul style="list-style-type: none"> <li>• Stainless steel or PTFE flow path</li> <li>• Three-way valves to allow selection between reagent and solvent lines or waste and collection lines</li> <li>• <i>Pumps:</i> HPLC or Peristaltic or Syringe</li> <li>• <i>Pumping rate range:</i> 0.05 mL/min to 50 mL/min per pump</li> <li>• Pump pressure sensors</li> <li>• System pressure sensor</li> <li>• Back pressure regulators for pump and system to 15 bar</li> <li>• <i>Photochemical module:</i> irradiation of coil reactors, ability to use multiple wavelength LED or mercury (low pressure and medium pressure) light sources (minimum requirements are to include 365 and 410nm)</li> <li>• Automated control interface with touchscreen/PC/laptop and software included</li> </ul> <p><i>Quotations only requested from OEMs or authorized distributors (confirmation to be included in application).</i></p>	1		
3.	<p><b>Standard heated tubular reactor module</b></p> <ul style="list-style-type: none"> <li>• <i>Tubular reactor heating range:</i> 25 to 150°C</li> <li>• <i>Tubular reactors with dimensions:</i> Volume 2-10 mL, flow rate up to 100mL/min</li> </ul>	4		

	<ul style="list-style-type: none"> <li><i>Note: Strong acid resistance required</i></li> </ul>			
<b>4.</b>	<p><b><i>High temperature tubular reactor module</i></b></p> <ul style="list-style-type: none"> <li><i>Tubular reactor heating range: 150 to 300°C</i></li> <li><i>Tubular reactors with dimensions: Volume 2-10 mL, flow rate up to 100mL/min</i></li> <li><i>Material: Hastelloy</i></li> </ul>	<b>1</b>		
<b>5.</b>	<p><b><i>Low temperature tubular reactor module</i></b></p> <ul style="list-style-type: none"> <li><i>Tubular reactor heating range: -70 to 0°C</i></li> <li><i>Tubular reactors with dimensions: Volume 5-10 mL, flow rate up to 100mL/min</i></li> <li>Reactor module to include option for a cooled quench line and/or pre-cooling of reagent lines</li> </ul>	<b>1</b>		
<b>6.</b>	<p><b><i>Mixing chip reactor module</i></b></p> <ul style="list-style-type: none"> <li><i>Chip manifold heating range: 30-150°C</i></li> <li><i>Chip dimensions: Volumes 2 ml to 20 mL</i></li> <li><i>Note: Minimum of one chip to be included in the quotation for each module</i></li> </ul>	<b>2</b>		
<b>7.</b>	<p><b><i>Column reactor module</i></b></p> <ul style="list-style-type: none"> <li><i>Column reactor manifold heating range: 30-150°C</i></li> <li><i>Column reactors with dimensions: Diameters 10 mm and 15 mm</i></li> <li><i>Materials: Borosilicate glass, PTFE, Kalrez seals</i></li> </ul>	<b>2</b>		

	<ul style="list-style-type: none"> <li><i>Note:</i> Minimum of one column and associated housing to be included in the quotation for each module</li> </ul>			
<b>8.</b>	<p><b><i>Cooled column reactor module</i></b></p> <ul style="list-style-type: none"> <li><i>Column reactor manifold heating range:</i> - 40°C to ambient temperature.</li> <li><i>Column reactors with dimensions:</i> Diameters 10 mm and 15 mm</li> <li><i>Note:</i> Minimum of one column and associated housing to be included in the quotation for each module</li> </ul>	<b>1</b>		
<b>9.</b>	<p><b><i>Gas-liquid reactor module</i></b></p> <ul style="list-style-type: none"> <li><i>Operating conditions:</i> Volume 15 mL, temperature range ambient-150°C</li> <li><i>Operating conditions:</i> Gas volume 4 mL</li> <li>Maximum liquid supply pressure 30 bar and maximum gas supply pressure 30 bar</li> </ul>	<b>1</b>		
<b>10.</b>	<p><b><i>Cooling unit for reactor modules</i></b></p> <ul style="list-style-type: none"> <li><i>Temperature control range:</i> -70-0°C</li> <li>Cooled gas supplied by either nitrogen gas or compressed air</li> </ul>	<b>1</b>		
<b>11.</b>	<p><b><i>Automated fraction collector</i></b></p> <ul style="list-style-type: none"> <li>Gilson FC203B or similar</li> <li>Appropriate software to be included for operation with reactor systems</li> </ul>	<b>1</b>		
<b>12.</b>	<b><i>Installation, commissioning, and training</i></b>	<b>1</b>		

<b>13.</b>	<b>Service plan (3 years)</b> <i>Note: Year 1 to include on site full-service support, Year 2-3 to include self-service kits with virtual support</i>	<b>1</b>		
<b>14.</b>	<b>Freight</b>	<b>1</b>		
<b>Sub-Total</b>				
<b>VAT @ 15%</b>				
<b>Total</b>				

### Additional Requirements:

- The supplier must submit quotation on their official company letterhead.
- The supplier must quote on all the items/services exactly as listed in the above specification.
- The supplier must provide proof of status as authorized distributor if not the original equipment manufacturer.
- Delivery is to be made at CSIR Pretoria: maximum lead time of ten weeks after placing an order (if not possible supplier must indicate their maximum lead time and reason for deviation on this requirement).

### 3 BID EVALUATION PROCESS.

The RFQ will be evaluated as per the following:

a. Elimination Criteria

- The bidders will be evaluated on the elimination criteria as stated in Point
- Bidders who do not meet these criteria will not be evaluated further.

b. Price and B-BBEE

The tender responses will be evaluated on the 80/20 preferential point system.

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### 3.1 Elimination Criteria

Bidders will be eliminated if they fail to provide the following information:

- Late submission of Quotes;
- Submission to an incorrect email address (Only electronic submission to [tender@csir.co.za](mailto:tender@csir.co.za) will be considered);
- Bidders who are restricted by National Treasury;
- Failure to provide the quotations as per specification;
- Failure to provide proof that the supplier is original equipment manufacturers (OEMs) or authorized distributors.

### 3.2 Preferential Points System Evaluation Criteria

Selection of suppliers will be based on the 80/20 preference point system.

- Please provide detailed breakdown of all direct and indirect costs associated with the contract, including all fees if any for the full contract period.
- Provide a valid certified copy of a B-BBEE Certificate or valid sworn affidavit. No B-BBEE status will equal zero points. B-BBEE certificate must be issued by SANAS accredited agency or a valid sworn affidavit in line with DTI regulations. (RSA suppliers only).
- Indicate CSD number (National Treasury Central Supplier Database) on quotation. If not registered yet on CSD, use [www.csd.gov.za](http://www.csd.gov.za) to register.
- 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 MANDATORY RETURNABLE DOCUMENT**

Bidders must provide all required documents as per Annexure C: Mandatory returnable Documents.

#### **6 CSIR RESERVES THE RIGHT TO**

- Extend the closing date;
- Verify any information contained in a proposal;
- Request documentary proof regarding any tendering issue;
- Meet with the service providers to clarify the competency of the suggested professional that will be allocated to the CSIR for this short-term contract.
- Award this RFQ as a whole or in part;
- Cancel or withdraw this RFQ as a whole or in part.

#### **7 CONFIDENTIALITY**

Some of the information contained in the Tender Documents may be of a confidential nature and must only be used for purposes of responding to this RFQ. This confidentiality clause extends to bidder partners whom you may decide to involve in preparing a response to this RFQ. Bidders must complete and sign **ANNEXURE A: Non- Disclosure Agreement.**



## **8 MEDIUM OF COMMUNICATION**

All documentation submitted in response to this RFQ must be in English.

## **9 COST OF PROPOSAL**

Bidders are expected to fully acquaint themselves with the conditions, requirements and specifications of this RFQ before submitting proposals. Each bidder assumes all risks for resource commitment and expenses, direct or indirect, of proposal preparation and participation throughout the RFQ process. The CSIR is not responsible directly or indirectly for any costs incurred by bidders.

## **10 CORRECTNESS OF RESPONSES**

- 10.1 The bidder must confirm satisfaction regarding the correctness and validity of their proposal and that all prices and rates quoted cover all the work/items specified in the RFQ. The prices and rates quoted must cover all obligations under any resulting contract.
- 10.2 The bidder accepts that any mistakes regarding prices and calculations will be at their own risk.

## **11 VERIFICATION OF DOCUMENTS**

- 11.1 Bidders should check the numbers of the pages to satisfy themselves that none are missing or duplicated. No liability will be accepted by the CSIR in regard to anything arising.
- 11.2 Pricing schedule and B-BBEE credentials should be submitted with the proposal, but as a separate document and no such information should be available in the technical proposal.

## **12 OTHER TERMS AND CONDITIONS**

- 12.1 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.
- 12.2 A validity period of 90 days will apply to all quotations except where indicated differently on the quote.
- 12.3 No goods and/or services must be delivered to the CSIR without an official CSIR Purchase order. CSIR purchase order number must be quoted on the invoice. Invoices without CSIR purchase order numbers will be returned to supplier.

## **13 DISCLAIMER**

This RFQ is a request for proposals only and not an offer document. Answers to this RFQ must not be construed as acceptance of an offer or imply the existence of a contract between the parties. By submission of its proposal, bidders shall be deemed to have satisfied themselves with and to have accepted all Terms & Conditions of this RFQ. The CSIR makes no representation, warranty, assurance, guarantee or endorsements to bidder concerning the RFQ, whether with regard to its accuracy, completeness or otherwise and the CSIR shall have no liability towards the bidder or any other party in connection therewith.

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

**DECLARATION BY TENDERER**

**Only tenderers who completed the declaration below will be considered for evaluation.**

**RFQ No. 9329/26/11/2021**

I hereby undertake to render services described in the attached tendering documents to CSIR in accordance with the requirements and task directives / quotation specifications stipulated in RFQ No..... at the price/s quoted. My offer/s remains binding upon me and open for acceptance by the CSIR during the validity period indicated and calculated from the closing date of the quotation.

I confirm that I am satisfied with regards to the correctness and validity of my quotation; that the price(s) and rate(s) quoted cover all the services specified in the quotation documents; that the price(s) and rate(s) cover all my obligations and I accept that any mistakes regarding price(s) and rate(s) and calculations will be at my own risk.

I accept full responsibility for the proper execution and fulfilment of all obligations and conditions devolving on me under this RFQ as the principal liable for the due fulfilment of this RFQ process.

I declare that I have no participation in any collusive practices with any tenderer or any other person regarding this or any other RFQ proposal.

I accept that the CSIR may take appropriate actions, deemed necessary, should there be a conflict of interest or if this declaration proves to be false.

I confirm that I am duly authorised to sign this proposal.

NAME (PRINT) .....  
CAPACITY .....  
SIGNATURE .....  
NAME OF FIRM .....  
DATE

<b>WITNESSES</b>	
1	.....
2	.....
DATE: .....	