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Tender

## **Integrated bioreactor platform for rapid scale-up and translation**

UNIVERSITY OF MANCHESTER

F02: Contract notice

Notice identifier: 2023/S 000-011610

Procurement identifier (OCID): ocids-h6vhtk-03c372

Published 24 April 2023, 9:48am

### **Section I: Contracting authority**

#### **I.1) Name and addresses**

UNIVERSITY OF MANCHESTER

John Owens Building, Oxford Road

MANCHESTER

M13 9PL

#### **Contact**

Paul Carter

#### **Email**

[paul.carter-2@manchester.ac.uk](mailto:paul.carter-2@manchester.ac.uk)

#### **Country**

United Kingdom

#### **Region code**

UKD33 - Manchester

**UK Register of Learning Providers (UKPRN number)**

10007798

**Internet address(es)**

Main address

<http://www.procurement.manchester.ac.uk/>

**I.3) Communication**

The procurement documents are available for unrestricted and full direct access, free of charge, at

<https://in-tendhost.co.uk/manchesteruniversity.aspx/Tenders/Current>

Additional information can be obtained from the above-mentioned address

Tenders or requests to participate must be submitted electronically via

<https://in-tendhost.co.uk/manchesteruniversity.aspx/Tenders/Current>

**I.4) Type of the contracting authority**

Body governed by public law

**I.5) Main activity**

Education

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## Section II: Object

### II.1) Scope of the procurement

#### II.1.1) Title

Integrated bioreactor platform for rapid scale-up and translation

Reference number

2023-2033-BRS-JW-PC

#### II.1.2) Main CPV code

- 42993000 - Chemical industry machinery

#### II.1.3) Type of contract

Supplies

#### II.1.4) Short description

This tender is being run on behalf of Dr James Winterburn, Reader in Chemical Engineering. Dr Winterburn led a successful BBSRC ALERT21 equipment bid "Integrated bioreactor platform for rapid scale-up and translation", which will provide significant bioreactor capacity for microbial fermentation process development, scale up and translation for a range of bio-based chemicals. The exploitation of bio-based production routes requires a thorough understanding of production strain performance and an ability to rapidly and effectively scale processes from millilitres to tens of litres. The bioreactor platform is intended to provide understanding of how process conditions at different volumes and variability across process parameters (e.g., mixing speeds, dissolved O<sub>2</sub>, pH), affect host cell performance. The integrated bioreactor platform will bridge across three scales, outlined below, and allow for rapid process development and ultimately support research translation.

? Small-scale: Parallel bioreactor system (500 mL, 6 vessels) for rapid parallel process development, strain testing and parameter optimization for microbial fermentations in batch, fed-batch and continuous cultivation, with off gas analysis capability

? Mid-scale (3L bioreactor system, four vessels): For initial scale up and process development work (e.g., confirmation of feeding profiles, metabolic profiling) and preliminary process analysis (including; yield, productivity, final titre) with off gas analysis capability. Also serves as the seed train for inoculum preparation for scale up to 40L.

? Large-scale feasibility (40L SIP bioreactor): To enable in-house demonstration of

process technical feasibility, production of sufficient quantities of material for application testing and benchmarking and provision of data for robust techno-economic analysis which can be used as the basis for commercialisation, also with off gas analysis capability.

### **II.1.6) Information about lots**

This contract is divided into lots: No

## **II.2) Description**

### **II.2.2) Additional CPV code(s)**

- 38000000 - Laboratory, optical and precision equipments (excl. glasses)

### **II.2.3) Place of performance**

NUTS codes

- UKD3 - Greater Manchester

Main site or place of performance

The University of Manchester

### **II.2.4) Description of the procurement**

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### **II.2.5) Award criteria**

Price is not the only award criterion and all criteria are stated only in the procurement documents

### **II.2.7) Duration of the contract, framework agreement or dynamic purchasing system**

Start date

8 June 2023

End date

14 February 2024

This contract is subject to renewal

No

### **II.2.10) Information about variants**

Variants will be accepted: No

### **II.2.11) Information about options**

Options: No

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## **Section IV. Procedure**

### **IV.1) Description**

#### **IV.1.1) Type of procedure**

Open procedure

#### **IV.1.8) Information about the Government Procurement Agreement (GPA)**

The procurement is covered by the Government Procurement Agreement: Yes

#### **IV.2) Administrative information**

##### **IV.2.2) Time limit for receipt of tenders or requests to participate**

Date

25 May 2023

Local time

12:00pm

##### **IV.2.4) Languages in which tenders or requests to participate may be submitted**

English

##### **IV.2.6) Minimum time frame during which the tenderer must maintain the tender**

Duration in months: 3 (from the date stated for receipt of tender)

##### **IV.2.7) Conditions for opening of tenders**

Date

25 May 2023

Local time

12:05pm

Place

The University of Manchester

Information about authorised persons and opening procedure

The University of Manchester staff only

## **Section VI. Complementary information**

### **VI.1) Information about recurrence**

This is a recurrent procurement: No

### **VI.2) Information about electronic workflows**

Electronic ordering will be used

Electronic invoicing will be accepted

Electronic payment will be used

### **VI.4) Procedures for review**

#### **VI.4.1) Review body**

The University of Manchester

Manchester

Country

United Kingdom