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): ocds-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

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

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 O2, 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

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