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Tender

## **Plasma Focused Ion Beam and Gallium Focused Ion Beam**

University of Bristol

F02: Contract notice

Notice identifier: 2022/S 000-026656

Procurement identifier (OCID): ocds-h6vhtk-036add

Published 23 September 2022, 10:50am

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

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

University of Bristol

4th Floor, Augustine's Courtyard, Orchard Lane

Bristol

BS1 5DS

#### **Email**

[lucy.neaves@bristol.ac.uk](mailto:lucy.neaves@bristol.ac.uk)

#### **Telephone**

+44 01179289000

#### **Country**

United Kingdom

#### **Region code**

UKK - South West (England)

**Internet address(es)**

Main address

[www.bristol.ac.uk](http://www.bristol.ac.uk)

**I.3) Communication**

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

<https://tenders.bris.ac.uk/>

Additional information can be obtained from the above-mentioned address

Tenders or requests to participate must be submitted electronically via

<https://tenders.bris.ac.uk/>

Tenders or requests to participate must be submitted to the above-mentioned address

**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**

Plasma Focused Ion Beam and Gallium Focused Ion Beam

#### **II.1.2) Main CPV code**

- 38512100 - Ion microscopes

#### **II.1.3) Type of contract**

Supplies

#### **II.1.4) Short description**

The scope is divided into two items with both items to be provided by the same supplier as part of one tender.

1. The Supply, Installation, Commissioning, Training and Support of a Plasma Focused Ion Beam (PFIB) Microscope, in the IAC.
2. The Supply, Installation, Commissioning, Training and Support of a new gallium focused ion beam (Ga-FIB) Microscope in the IAC

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

This contract is divided into lots: No

### **II.2) Description**

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

NUTS codes

- UKK - South West (England)

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

The IAC at UoB has identified a need to procure a Plasma-Focused Ion Beam (PFIB) system, which allows for:

- Dual-beam capability with field emission gun scanning electron microscopy (FEGSEM) and plasma-based focused ion beam,

- Micromachining with high milling rates,
- Sample liftout (size reduction),
- Tomography with analytical capability – integrating energy-dispersive X-ray (EDX) and electron backscatter diffraction (EBSD) bought separately from a third party supplier,
- Gas injection using XeF<sub>2</sub> enhanced etch, insulator, platinum and carbon, with options of other gas species.
- Cryogenic stage and vacuum transfer capability,
- Preparation of specimens for transmission electron microscopy (TEM) while minimising FIB-induced damage, atom probe tomography (APT) and micromechanical testing.
- Electrical feedthroughs for in-situ characterisation (minimum four channels for four-point resistance measurements).

In addition to the procurement of the PFIB instrument, UoB would like to also as part of this call upgrade the gallium focused ion beam (Ga-FIB) capability of the IAC facility, by procurement of a new Ga-FIB instrument, with the capability for:

- Dual-beam capability with FEGSEM and gallium focused ion beam
- Micromachining and imaging,
- Microcantilever manipulation of specimens for TEM, APT and micromechanical liftouts,
- Gas injection using XeF<sub>2</sub> enhanced etch, insulator and organo-metallics containing platinum, with options of other gas species.

Both of these instruments will be utilized within the Interface Analysis Centre (IAC) microscopy and materials facility at UoB, which will be used by a large number of researchers from a large number of UK, European and worldwide Universities, Research Institutes and Industry, thus the equipment and associated software must be simple and straightforward to use, robust and also be sufficiently interlocked to protect the system against accidental misuse.

The funding allocated for this equipment is a maximum of £1,900,000 (ex VAT). Tenders received above this value may be discounted.

#### **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

28 November 2022

End date

27 November 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

**II.2.13) Information about European Union Funds**

The procurement is related to a project and/or programme financed by European Union funds: 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: No

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

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

Date

24 October 2022

Local time

12:00pm

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

English

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

Date

24 October 2022

Local time

12:00pm

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## **Section VI. Complementary information**

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

This is a recurrent procurement: No

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

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

University of Bristol

Bristol

Country

United Kingdom