

This is a published notice on the Find a Tender service: <https://www.find-tender.service.gov.uk/Notice/035764-2022>

Contract

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

University of Bristol

F03: Contract award notice

Notice identifier: 2022/S 000-035764

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

Published 16 December 2022, 6:32pm

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

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

University of Bristol

4th Floor, Augustine's Courtyard, Orchard Lane

Bristol

BS1 5DS

#### **Email**

[yi19222@bristol.ac.uk](mailto:yi19222@bristol.ac.uk)

#### **Telephone**

+44 01179289000

#### **Country**

United Kingdom

#### **Region code**

UK - United Kingdom

**Internet address(es)**

Main address

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

**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**

Plasma Focused Ion Beam and Gallium Focused Ion Beam Microscopes

**II.1.2) Main CPV code**

- 38512100 - Ion microscopes

**II.1.3) Type of contract**

Supplies

**II.1.4) Short description**

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 XeF2 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 XeF2 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.

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

This contract is divided into lots: No

#### **II.1.7) Total value of the procurement (excluding VAT)**

Value excluding VAT: £1,790,000

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

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

NUTS codes

- UK - United Kingdom

### **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.

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

Quality criterion - Name: Technical / Weighting: 75

Cost criterion - Name: Price / Weighting: 25

#### **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

---

## **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.2.1) Previous publication concerning this procedure**

Notice number: [2022/S 000-026656](#)

---

## **Section V. Award of contract**

### **Contract No**

Lab-2205-118-PC\_2227

### **Title**

Plasma Focused Ion Beam and Gallium Focused Ion Beam Microscopes

A contract/lot is awarded: Yes

### **V.2) Award of contract**

#### **V.2.1) Date of conclusion of the contract**

22 November 2022

#### **V.2.2) Information about tenders**

Number of tenders received: 2

The contract has been awarded to a group of economic operators: No

#### **V.2.3) Name and address of the contractor**

FEI UK Ltd

c/o Oakwood Corporate Services Ltd, 1 Ashley Road

Altrincham

WA14 2DT

Country

United Kingdom

NUTS code

- UK - United Kingdom

The contractor is an SME

No

**V.2.4) Information on value of contract/lot (excluding VAT)**

Total value of the contract/lot: £1,790,000

---

**Section VI. Complementary information**

**VI.4) Procedures for review**

**VI.4.1) Review body**

The University of Bristol

Bristol

Country

United Kingdom