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# Tender US\_23109 - Laser Systems and an Optical Reference System

University of Sussex

F02: Contract notice Notice identifier: 2023/S 000-029534 Procurement identifier (OCID): ocds-h6vhtk-040899 Published 6 October 2023, 1:14pm

# Section I: Contracting authority

## I.1) Name and addresses

University of Sussex

University of Sussex

Brighton

BN19RH

#### Contact

Anna Simmons

#### Email

anna.simmons@sussex.ac.uk

#### Country

United Kingdom

## **Region code**

UK - United Kingdom

#### National registration number

RC000672

## Internet address(es)

Main address

https://www.sussex.ac.uk/

## I.2) Information about joint procurement

The contract is awarded by a central purchasing body

## I.3) Communication

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

https://supplierlive.proactisp2p.com/Account/Login

Additional information can be obtained from the above-mentioned address

Tenders or requests to participate must be submitted electronically via

https://supplierlive.proactis2p.com/Account/Login

## 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

US\_23109 - Laser Systems and an Optical Reference System

Reference number

DN1538

## II.1.2) Main CPV code

• 38636100 - Lasers

## II.1.3) Type of contract

Supplies

## II.1.4) Short description

The University of Sussex is sharing this Invitation to Tender to obtain professional, properly defined and priced propositions for The Supply, Delivery, Warranty and Installation of Laser Systems over two lots.

Lot 1 – The Supply, Delivery, Warranty, and Installation of Laser Systems.

Lot 2 – The Supply, Delivery, Warranty, and Installation of an Optical Reference System.

Bidders are invited to submit their propositions (tender returns) for Lot 1 and/or Lot 2 only after carefully reading this document and assessing their suitability for this tender.

## II.1.6) Information about lots

This contract is divided into lots: Yes

Tenders may be submitted for all lots

## II.2) Description

## II.2.1) Title

The Supply, Delivery, Warranty and Installation of Laser Systems

Lot No

1

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

• 38636100 - Lasers

## II.2.3) Place of performance

NUTS codes

• UK - United Kingdom

## II.2.4) Description of the procurement

The University of Sussex are seeking to procure a number of multiple independently tunable diode laser models with the following characteristics:

1. Multiple independently tunable diode laser modules:

1.1. Tuneable diode sources for Yb ions, linewidth 15GHz

1.1.1. Laser at 369.5nm, 60mW (via second harmonic generation; with additional output of fundamental at 739nm), QTY 4

1.1.2. Laser at 935nm, 60mW, QTY 3

1.1.3. Laser at 760nm, 20mW, QTY 4

- 1.1.4. Laser at 399nm, 60mW, QTY 2
- 1.2. Tuneable diode sources for Ba ions, linewidth 15GHz
- 1.2.1. Laser at 493nm, 30mW, QTY 2
- 1.2.2. Laser at 650nm, 40mW, QTY 2
- 1.2.3. Laser at 413nm, 30mW, QTY 1

1.2.4. Laser at 533nm, 120mW (via second harmonic generation; with additional output of fundamental at 1.01um), QTY 1  $\,$ 

1.3. Free-running UV diode at 405nm, GHz linewidth, 80mW, fibre coupled, QTY 1

1.4. All units within 1.1 – 1.3 to be housed in a suitable number of 19inch rack modules, with full thermal management and vibration isolation (better than 200MHz/K stability)

4. Integrated modular multi-unit laser rack infrastructure

4.1. Portable 19inch racks sufficient to house all units 1, 2, and 3.

4.2. Digital controllers for all laser units within 1.1 - 1.3, allowing remote monitoring and control of laser parameters, including:

4.2.1. Scanning and modulation of laser output wavelength

4.2.2. Signal display using configurable input signals

- 4.2.3. Intelligent wavelength locking and re-locking
- 4.2.4. Power stabilisation feedback

4.3. Fast (10ns) analog feedback electronics for units 1.1.1, 1.1.2, 1.2.1 and 1.2.2 suitable to implement Pound-Drever-Hall wavelength locking and linewidth narrowing, together with reference cavities of item 2.1

#### II.2.5) Award criteria

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

## II.2.6) Estimated value

Value excluding VAT: £1,000,000

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

Duration in months

36

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

## II.2) Description

## II.2.1) Title

Lot No

#### 2

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

• 38636100 - Lasers

#### II.2.3) Place of performance

NUTS codes

• UK - United Kingdom

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

The University of Sussex are seeking to procure an Optical Reference System with the following characteristics:

2. Stabilised laser locking reference cavity sub-system

2.1. Sufficient optical reference cavities to enable narrow linewidth (1000) optical coating of cavity mirrors

2.1.2. Passive length stability corresponding to resonance shift of