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Tender

## **Amplified Ultrafast Laser System for Scientific Research**

University of Bristol

F01: Prior information notice

Call for competition

Notice identifier: 2022/S 000-016568

Procurement identifier (OCID): ocds-h6vhtk-03475d

Published 16 June 2022, 3:11pm

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

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

University of Bristol

4th Floor, Augustine's Courtyard, Orchard Lane

Bristol

BS1 5DS

#### **Contact**

Helen Warren

#### **Email**

[helen.warren@bristol.ac.uk](mailto:helen.warren@bristol.ac.uk)

#### **Telephone**

+44 01179289000

#### **Country**

United Kingdom

**NUTS code**

UKK11 - Bristol, City of

**Internet address(es)**

Main address

<https://www.bristol.ac.uk/>

Buyer's address

<https://www.bristol.ac.uk/chemistry/research/>

**I.3) Communication**

Access to the procurement documents is restricted. Further information can be obtained at

<https://tenders.bris.ac.uk/web/login.html>

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/web/login.html>

Tenders or requests to participate must be submitted to the following address:

Labs Procurement - University of Bristol

Bristol

**Contact**

Helen Warren

**Email**

[helen.warren@bristol.ac.uk](mailto:helen.warren@bristol.ac.uk)

**Country**

United Kingdom

**NUTS code**

UKK11 - Bristol, City of

**Internet address(es)**

Main address

<https://tenders.bris.ac.uk/web/login.html>

**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**

Amplified Ultrafast Laser System for Scientific Research

Reference number

Lab-2206-135-PC\_2273

**II.1.2) Main CPV code**

- 38636100 - Lasers

**II.1.3) Type of contract**

Supplies

**II.1.4) Short description**

The University of Bristol School of Chemistry is looking to procure an amplified ultrafast laser system for use in studies of photochemical dynamics.

The laser should consist of an ultrafast oscillator and an amplifier, in a one-box design for optimum stability of operation in our laboratory. Sufficient power output is required to pump two existing optical parametric amplifiers (OPAs), operating with 800-nm pump wavelengths, to generate ultraviolet and mid-infrared laser beams at a laser pulse repetition rate of 1 kHz.

#### **II.1.5) Estimated total value**

Value excluding VAT: £268,330

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

This contract is divided into lots: No

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

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

NUTS codes

- UKK11 - Bristol, City of

Main site or place of performance

School of Chemistry,

University of Bristol,

Cantock's Close,

Bristol

BS8 1TS

United Kingdom

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

About the Project

Ultrafast photochemical dynamics of molecules in solution and in protein environments will be studied using the techniques of transient absorption spectroscopy and two-dimensional infrared spectroscopy. The project is funded by EPSRC Programme Grant EP/V026690/1, Ultrafast Photochemical Dynamics in Complex Environments.

## The Equipment

We require an amplified ultrafast laser system for use in studies of photochemical dynamics. The laser should consist of an ultrafast oscillator and an amplifier, in a one-box design for optimum stability of operation in our laboratory. Sufficient power output is required to pump two existing optical parametric amplifiers (OPAs, operating with 800-nm pump wavelengths) to generate ultraviolet and mid-infrared laser beams at a laser pulse repetition rate of 1 kHz.

### Essential Requirements

- One-box system\*. The equipment is to be installed on an optical table and must be smaller than 1.5 m x 0.9 m in footprint. (\*Note: one-box means the equipment on the optical table, and does not therefore include items such as power supplies and cooling units).
- Output fundamental wavelength close to 800 nm, compatible with our OPAs
- Pulse durations close to 35 fs.
- Repetition rate of 1 kHz.
- Average power greater than or equal to 5W at the fundamental wavelength (and 5 mJ per pulse).
- Power stability of better than 0.5% RMS over 24 hours.
- Pointing stability of better than 20 micro-radians.
- Circular beam profile with TEM00 mode beam quality factor (M-squared value) of less than 1.3.
- Compatibility with operation of two Coherent Opera Solo Optical Parametric Amplifiers.

Minimum one-year on-site service warranty to cover parts, labour and travel must be included in the purchase price.

Delivery to School of Chemistry, University of Bristol, Cantock's Close, Bristol BS8 1TS, UK. The School of Chemistry has an accessible loading bay. The laser installation will be in a basement lab which will present some access issues.

On-site one-day training for at least 3 people should be available in order to bring users (Postdoctoral researchers and PhD students) up to a basic knowledge of use and maintenance of the equipment.

Suppliers should include in their expression of interest the following information:

Compliance to all essential criteria

The expected lead-time for delivery and installation

Potential supply-chain issues that may pose a risk to the delivery schedule

Requirements for a Site Visit to view potential access issues

#### **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: £268,330

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

Duration in months

18

#### **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.2.14) Additional information**

This Prior Information Notice is a Call for Competition. Suppliers wishing to express their interest should register via <https://tenders.bris.ac.uk/web/login.html>

This procurement shall be contracted on the University of Bristol Standard Terms and Conditions for Goods and Services. A copy of the Terms and Conditions are available on request.

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## **Section III. Legal, economic, financial and technical information**

### **III.1) Conditions for participation**

#### **III.1.2) Economic and financial standing**

Selection criteria as stated in the procurement documents

#### **III.1.3) Technical and professional ability**

Selection criteria as stated in the procurement documents

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## **Section IV. Procedure**

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

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

Restricted 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 expressions of interest**

Date

22 July 2022

Local time

4:00pm

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

English

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## **Section VI. Complementary information**

### **VI.3) Additional information**

Please consult the procurement documents available at the address indicated in Section I.3)

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

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

University of Bristol

Bristol

Country

United Kingdom