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
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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

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

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

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.

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

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

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