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Tender

# **Supply and Installation of an Environmental Thermal Mechanical Test System**

University of Birmingham

F02: Contract notice

Notice identifier: 2022/S 000-006431

Procurement identifier (OCID): ocds-h6vhtk-031fb9

Published 9 March 2022, 11:38am

## **Section I: Contracting authority**

## I.1) Name and addresses

University of Birmingham

**Chancellors Court** 

Edgbaston

B15 2TT

#### Contact

Susanna Ting

#### **Email**

s.y.ting@bham.ac.uk

#### Country

**United Kingdom** 

#### **NUTS** code

UKG31 - Birmingham

Internet address(es)

Main address

www.birmingham.ac.uk/index.aspx

## I.3) Communication

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

www.in-tendhost.com/universityofbirmingham

Additional information can be obtained from the above-mentioned address

Tenders or requests to participate must be submitted electronically via

www.in-tendhost.com/universityofbirmingham

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

# **Section II: Object**

## II.1) Scope of the procurement

II.1.1) Title

Supply and Installation of an Environmental Thermal Mechanical Test System

Reference number

SC10029/22

#### II.1.2) Main CPV code

• 38000000 - Laboratory, optical and precision equipments (excl. glasses)

#### II.1.3) Type of contract

**Supplies** 

#### II.1.4) Short description

The University of Birmingham invites tenders for supply of an environmental thermal mechanical test system for in-situ irradiation. The University operates an MC40 Cyclotron and a neutron beam facility is currently being built. The MC40 Cyclotron can produce the proton beam energies in the range of 3~38 MeV.To support the nuclear research in the UK, the University has been awarded a project by EPSRC to develop a system which will enable the mechanical testing of materials under vacuum (and potentially other environments), and with the capability of in-situ irradiation.

#### II.1.5) Estimated total value

Value excluding VAT: £300,000

## II.1.6) Information about lots

This contract is divided into lots: No

#### II.2) Description

#### II.2.3) Place of performance

**NUTS** codes

• UKG31 - Birmingham

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

The University of Birmingham invites tenders for the supply of a thermal mechanical test system for in-situ irradiation. The University operates an MC40 Cyclotron and a neutron beam facility is currently being built. The MC40 Cyclotron can produce the proton beam energies in the range of 3~38 MeV. The proposed system will be integrated to the Cyclotron and/or the neutron beams for mechanical testing under elevated temperatures, with in-situ irradiation. The system needs to be interface with the irradiation beams at the University of Birmingham. Thus, it is expected that the system should be mobile and/or adjustable in terms of the positioning. The system shall be able to operate under different environmental conditions, such as air, vacuum or gaseous. The system shall enable the testing of flat samples, but the capability of testing samples of other geometries (such as

cylindrical) is highly desirable. The system shall be able to accurately measure and control the temperate of the testing sample. The maximum testing sample temperature equal to, or greater than, 1200 oC is needed. The capability of testing at temperatures lower than the ambient temperature is a plus. The system shall be able to accurately measure and control the displacement/strain on the testing sample. The capability of remote strain measurement such as digital image correlation is highly desirable. The system shall be able to provide the maximum load of 5 kN or above. It is highly desirable to have exchangeable load-cells with different maximum loads. The system shall have a digital control system to deliver custom deformation waveforms (e.g. static loading, creep, fatigue including TMF etc), as well as cooled (using liquid nitrogen/water) grips for temperature control (essential for samples subjected to high beam currents).

#### II.2.5) Award criteria

Quality criterion - Name: Compliance to the Specifications 40% After Sales and Technical back up 10% Delivery and Training 10% Sustainability and Environmental 5% Standard Supplier Questionnaire 10% / Weighting: 75

Price - Weighting: 25

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

End date

31 October 2022

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

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

Date

11 April 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

11 April 2022

Local time

12:00pm

# **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 Birmingham

Edgbaston

B15 2TT

Email

s.y.ting@bham.ac.uk

Country

**United Kingdom**