

This is a published notice on the Find a Tender service: <https://www.find-tender.service.gov.uk/Notice/017572-2024>

Tender

DLSITT1020 - Supply of a Versatile X-ray Diffractometer based on a Laboratory Source at Diamond Light Source

Diamond Light Source Ltd

F02: Contract notice

Notice identifier: 2024/S 000-017572

Procurement identifier (OCID): ocds-h6vhtk-046de8

Published 6 June 2024, 11:02am

Section I: Contracting authority

I.1) Name and addresses

Diamond Light Source Ltd

Harwell Science and Innovation Campus

Didcot

OX11 0ED

Contact

Debbie Pryor

Email

procurement@diamond.ac.uk

Telephone

+44 1235567575

Country

United Kingdom

Region code

UKJ14 - Oxfordshire

Companies House

4375679

Internet address(es)

Main address

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

I.3) Communication

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

<https://www.diamondtenders@diamond.ac.uk/Home.aspx>

Additional information can be obtained from the above-mentioned address

Tenders or requests to participate must be submitted electronically via

<https://www.diamondtenders@diamond.ac.uk>

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

Other activity

Scientific Research

Section II: Object

II.1) Scope of the procurement

II.1.1) Title

DLSITT1020 - Supply of a Versatile X-ray Diffractometer based on a Laboratory Source at Diamond Light Source

Reference number

DLSITT1020

II.1.2) Main CPV code

- 33111000 - X-ray devices

II.1.3) Type of contract

Supplies

II.1.4) Short description

Located on the Harwell Science and Innovation Campus in Oxfordshire, Diamond is a leading- edge facility for science, engineering and innovation. It is the largest science facility to be built in the UK for 40 years and produces ultra-violet, infra-red and X-ray beams of exceptional brightness.

The scope is to deliver, install and commission a versatile x-ray system based on an x-ray source, optics, diffractometer and detector. The system will be located at a permanent fixed position on the floor of the Optics Fabrication Building Lab. 5.

The instrument will be mainly dedicated for reflectivity measurements to characterise testing of multilayer optical elements for the Multilayer Deposition System. The optical elements to be tested are mirrors, thin films and multilayers. These will be either free standing or mounted on holders. Therefore, a large range of sample weights and sizes should be possible to be installed on the diffractometer. It is envisaged that the instrument will be used for measuring high resolution reflectivity. Mirror and multilayer measurements will be done at grazing incidence angle. The diffractometer will have to accommodate samples weighing up to 1 kg with dimensions up to 100mm (Length)×50mm (Width)×50 mm (Height)., appropriate stage motion to perform measurements at different positions on (to map) the sample.

It is expected that the versatile x-ray diffractometer will be based on: a high intensity x-ray tube with a copper target; interchangeable, high energy and angle resolution x-ray optical

modules for pre- and post-processing the x-ray beam; 4 circle diffractometer with sample stage allowing X, Y, Z translations, sample rotation and tilt adjustment perpendicular to the incident beam. The optics modules will be chosen according to required beam intensity, collimation, resolution and size.

II.1.6) Information about lots

This contract is divided into lots: No

II.2) Description

II.2.3) Place of performance

NUTS codes

- UKJ14 - Oxfordshire

II.2.4) Description of the procurement

Located on the Harwell Science and Innovation Campus in Oxfordshire, Diamond is a leading- edge facility for science, engineering and innovation. It is the largest science facility to be built in the UK for 40 years and produces ultra-violet, infra-red and X-ray beams of exceptional brightness.

The scope is to deliver, install and commission a versatile x-ray system based on an x-ray source, optics, diffractometer and detector. The system will be located at a permanent fixed position on the floor of the Optics Fabrication Building Lab. 5.

The instrument will be mainly dedicated for reflectivity measurements to characterise testing of multilayer optical elements for the Multilayer Deposition System. The optical elements to be tested are mirrors, thin films and multilayers. These will be either free standing or mounted on holders. Therefore, a large range of sample weights and sizes should be possible to be installed on the diffractometer. It is envisaged that the instrument will be used for measuring high resolution reflectivity. Mirror and multilayer measurements will be done at grazing incidence angle. The diffractometer will have to accommodate samples weighing up to 1 kg with dimensions up to 100mm (Length)×50mm (Width)×50 mm (Height)., appropriate stage motion to perform measurements at different positions on (to map) the sample.

It is expected that the versatile x-ray diffractometer will be based on: a high intensity x-ray tube with a copper target; interchangeable, high energy and angle resolution x-ray optical modules for pre- and post-processing the x-ray beam; 4 circle diffractometer with sample stage allowing X, Y, Z translations, sample rotation and tilt adjustment perpendicular to the incident beam. The optics modules will be chosen according to required beam intensity, collimation, resolution and size.

II.2.5) Award criteria

Quality criterion - Name: Technical Quality / Weighting: 20

Quality criterion - Name: Experience & Capacity / Weighting: 25

Quality criterion - Name: Delivery / Weighting: 5

Quality criterion - Name: Commercial / Weighting: 5

Quality criterion - Name: DLS Support Effort / Weighting: 5

Price - Weighting: 40

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

Duration in months

8

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

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

8 July 2024

Local time

12:00pm

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

English

IV.2.6) Minimum time frame during which the tenderer must maintain the tender

Duration in months: 3 (from the date stated for receipt of tender)

IV.2.7) Conditions for opening of tenders

Date

8 July 2024

Local time

1:00pm

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

Diamond Light Source

Harwell Science and Innovation Campus

Didcot

OX11 0ED

Country

United Kingdom