See the notice on TED website

Denmark-Kgs. Lyngby: Laboratory, optical and precision equipments (excl. glasses)
OJ S 241/2023 14/12/2023
Contract award notice
Supplies

Legal Basis:
Directive 2014/24/EU

Section I: Contracting authority

I.1. Name and addresses

Official name: Danmarks Tekniske Universitet - DTU
National registration number: 30060946
Postal address: Anker Engelunds Vej 1
Town: Kgs. Lyngby
NUTS code: DK01 Hovedstaden
Postal code: 2800
Country: Denmark
Contact person: David Fajnzylber
E-mail: dafaj@dtu.dk
Telephone: +45 93596840
Internet address(es):
Main address: http://www.dtu.dk
Address of the buyer profile: https://eu.eu-supply.com/ctm/Company/CompanyInformation/Index/165863

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

X-ray diffractometer (XRD)

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

This tender is for the acquisition of a multipurpose high-resolution X-ray diffractometer (XRD) system intended for a university facility, which provides access to an extensive suite of characterization tools as one of its core purposes. The facility caters to users from various levels of experience and tech-nical backgrounds within the university and serves commercial customers as well.

II.1.6. Information about lots

This contract is divided into lots: no

II.1.7. Total value of the procurement

Value excluding VAT: 3 900 800,00 DKK

II.2. Description

II.2.2. Additional CPV code(s)

38300000 Measuring instruments, 38400000 Instruments for checking physical characteristics, 38900000 Miscellaneous evaluation or testing instruments

II.2.3. Place of performance

NUTS code: DK0 Danmark

II.2.4. Description of the procurement

Instrument Specifications:
The instrument configuration must be a vertical diffractometer with horizontal sample mounting. The
goniometer should support an in-plane (non-coplanar) arm and allow uncoupled movements of the
source (ω), in-plane (coplanar/2θχ), and out-of-plane (2θ) arms. Additionally, the sample stage should
support tilt (χ) and rotation (ϕ).
Techniques to be Supported:
The instrument will be used for the following techniques:
• Reciprocal space mapping (RSM)
• X-ray reflectivity (XRR)
• In-Plane Diffraction (2θχ, ϕ/2θχ)
• Grazing incidence XRD (2θ scans)
• HRXRD (high-resolution rocking curves, etc.)
• Phase analysis (coupled and uncoupled θ/2θ and 2θ/ω scans)
• Residual stress measurements
• Texture analysis
• Other options requiring dedicated focusing solutions, such as micro-area XRD, may also be considered.
Radiation Source:
The instrument is intended to have a rotating anode that produces monochromatic Cu Kα radiation. It
should support switchable Bragg-Brentano (divergent beam) and Parallel Beam configurations and include
a solution for point focus. To eliminate Cu Kα2 and improve angular resolution in HRXRD, an incident beam monochromator and receiving analyzer need to be provided.
Detector Requirements:
The detector should support 0D, 1D, and 2D measurement modes to eliminate the inconvenience of
preparing and switching individual detectors for different applications. It must possess a large active
area, small pixel size, and fluorescence suppression. The detector's orientation must be changeable
from vertical to horizontal mounting.

Sample Handling:
The instrument will perform XRD analysis on a variety of samples with varying shapes, textures, and
sizes, including powders and thin films. Versatile sample holders must be included to enable the analysis
of samples ranging from tiny amounts of powders and small chips to 150 mm wafers. A mapping
option is needed to measure points sequentially across larger samples with high accuracy. Another
desired feature includes optical imaging of the sample and easy and accurate navigation to desired
measurement positions identified through the camera.
Automation and User-Friendly Interface:
Given the multi-user environment, it is essential that the operation procedure is highly automated.
Manual handling of slits, monochromators, focusing mirrors, etc., should be minimized. Additionally,
simple guided routines for optics and sample alignment and the most common types of measurement
are expected to facilitate safe operation by new users with little or no experience after proper training.
The instrument must be largely operated by means of a computer with software featuring a dedicated
user-friendly interface.
Data Processing and Network Solution:
Comprehensive routines for powder XRD, evaluation of HRXRD and XRR, texture analysis, and stress
evaluation should be included to process the acquired data. To accommodate multiple users, a network
solution or similar approach must be provided to guarantee simultaneous access to data analysis.
The software solutions should be intuitive and straightforward to use, considering the intended number of users.

II.2.5. Award criteria

Quality criterion - Name: Quality and functionality / Weighting: 45
Quality criterion - Name: Service / Weighting: 15
Price - Weighting: 40

II.2.11. Information about options

Options: yes
Description of options:
Option: Optics, divergent beam monochromatization: Flat multilayer mirror for creating a monochromated divergent beam.
Option: Heating stage: Non-ambient heating stage with heating up to at least 300 degrees in a controlled gas atmosphere.
Option: Airtight specimen holder: Airtight specimen holder for environmentally sensitive thin films on a flat substrate. Best if it's possible to mount sample in a glovebox and move it to the goniometer protected from air.

Option: Above sample observation camera: Optical imaging of the sample and easy control of navigation to measurement positions viewed using the camera.
Minimum option: Software: Texture ODF analysis (if not included in a basis software package).
Minimum option: Software: Rietveld Analysis Powder (if not included in a basis software package).

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

Section IV: Procedure

IV.1. Description

IV.1.1. Type of procedure

Open procedure

IV.1.3. Information about a framework agreement or a dynamic purchasing system

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.2.1. Previous publication concerning this procedure

Notice number in the OJ S: 2023/S 176-552418

IV.2.8. Information about termination of dynamic purchasing system

IV.2.9. Information about termination of call for competition in the form of a prior information notice

Section V: Award of contract

Contract No: 1

Title:
X-ray diffractometer (XRD)

A contract/lot is awarded: yes

V.2. Award of contract

V.2.1. Date of conclusion of the contract

07/12/2023

V.2.2. Information about tenders

Number of tenders received: 1
The contract has been awarded to a group of economic operators: no

V.2.3. Name and address of the contractor

Official name: Ramcon A/S
National registration number: 12044976

Postal address: Blokken 76
Town: Birkerød
NUTS code: DK Danmark
Postal code: 3460
Country: Denmark
The contractor is an SME: no

V.2.4. Information on value of the contract/lot

Lowest offer: 3 900 800,00 DKK / Highest offer: 3 900 800,00 DKK taken into consideration

V.2.5. Information about subcontracting

Section VI: Complementary information

VI.3. Additional information

VI.4. Procedures for review

VI.4.1. Review body

Official name: Klagenævnet for Udbud
Postal address: Nævnenes hus, Toldboden 2
Town: Viborg
Postal code: 8800
Country: Denmark
E-mail: klfu@erst.dk
Telephone: +45 35291000
Internet address: http://www.klfu.dk

VI.4.3. Review procedure

Precise information on deadline(s) for review procedures:
Complaint regarding prequalification:
Complaint regarding prequalification must be submitted no later than 20 calendar days after notification has been sent to the concerned Candidates informing them who has been selected, if the notification includes the grounds for the decision, cf. lov om Klagenævnet for Udbud (Complaints Board for Tenders) § 7, Section 1.
Complaint regarding award of contract:
Complaint regarding the award of a contract must be submitted no later than 45 calendar days from the date after the Contracting Authority has published a notice in the European Union Official Journal informing that the Contracting Authority has awarded/concluded a contract, cf. lov om Klagenævnet for Udbud (Complaints Board for Tenders) § 7, Section 2, no. 1.
Complaint regarding award of a contract under a framework agreement with a reopening of the competition (mini-tender):
Complaint regarding the award of a contract under a framework agreement with a reopening of the competition must be submitted no later than 30 calendar days from the date after the Contracting Authority has notified the concerned Tenderers that a contract based on a framework agreement with a reopening of the competition has been awarded/concluded, if the notification includes the grounds for the decision, cf. lov om Klagenævnet for Udbud (Complaints Board for Tenders) § 7, Section 2, no. 2.
Complaint regarding the award of a framework agreement:

Complaint regarding the award of a contract must be submitted no later than 6 months from the date after the Contracting Authority has notified the concerned Candidates and Tenderers that a framework agreement has been concluded, cf. lov om Klagenævnet for Udbud (Complaints Board for Tenders) § 7, Section 2, no. 3.
Complaint regarding direct award of contract:
Complaint that the Contracting Authority, contrary to the Public Procurement Act, has concluded a contract without prior publication of a contract notice in the European Union Official Journal must be submitted no later than 30 calendar days from the date after a contract award notice has been published by the Contracting Authority in the European Union Official Journal and that contract award notice includes the grounds for the decision to award the contract directly, cf. lov om Klagenævnet for Udbud (Complaints Board for Tenders) § 7, section 3.
Compliant regarding public procurements below the EU threshold:
Complaint regarding violation of public procurements below the EU threshold must be submitted no later than 45 calendar days from the date after the Contracting Authority has notified the Tenderers about the award of contract, if this notification includes the grounds for the decision; and no later than 6 months from the date after the Contracting Authority has notified the concerned Candidates and Tenderers that a framework agreement has been concluded, if the notification includes the grounds for the decision, cf. lov om Klagenævnet for Udbud (Complaints Board for Tenders) § 7, section 4, no. 1 and 2. Compliant regarding prequalification on procurement below the EU threshold must be submitted no later than 20 calendar days from the date after the Contracting Authority has sent a notification to the concerned Candidates who has been selected and this notification includes the grounds for the decision, cf. lov om Klagenævnet for Udbud (Complaints Board for Tenders)) § 7, Section 5.

VI.4.4. Service from which information about the review procedure may be obtained

Official name: Konkurrence- og Forbrugerstyrelsen
Postal address: Carl Jacobsens Vej 35
Town: Valby
Postal code: 2500
Country: Denmark
E-mail: kfst@kfst.dk
Telephone: +45 41715000
Internet address: http://www.kfst.dk

VI.5. Date of dispatch of this notice

09/12/2023