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Contract

3406/NAMRC/JS/22 - Flash Analyser for Thermal Diffusivity Measurements

UNIVERSITY OF SHEFFIELD

F03: Contract award notice

Notice identifier: 2022/S 000-033929

Procurement identifier (OCID): ocds-h6vhtk-036a4d

Published 30 November 2022, 1:47pm

Section I: Contracting authority

I.1) Name and addresses

UNIVERSITY OF SHEFFIELD

Nuclear AMRC, Advanced Manufacturing Park, University of Sheffield, Brunel Way, Catcliffe

Rotherham

S60 5WG

Contact

Jamie Shaw

Email

jamie.shaw@sheffield.ac.uk

Telephone

+44 1142221516

Country

United Kingdom

Region code

UKE31 - Barnsley, Doncaster and Rotherham

UK Register of Learning Providers (UKPRN number)

10007157

Internet address(es)

Main address

www.in-tendhost.co.uk/sheffield

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

3406/NAMRC/JS/22 - Flash Analyser for Thermal Diffusivity Measurements

Reference number

3406/NAMRC/JS/22

II.1.2) Main CPV code

- 38434000 - Analysers

II.1.3) Type of contract

Supplies

II.1.4) Short description

The University of Sheffield wishes to invite tenders for a Flash Analyser for measuring thermal diffusivity on behalf of the Nuclear AMRC at Brunel Way, Catcliffe, Rotherham, S60 5WG

II.1.6) Information about lots

This contract is divided into lots: No

II.1.7) Total value of the procurement (excluding VAT)

Value excluding VAT: £175,000

II.2) Description

II.2.2) Additional CPV code(s)

- 38412000 - Thermometers
- 38432000 - Analysis apparatus

II.2.3) Place of performance

NUTS codes

- UKE31 - Barnsley, Doncaster and Rotherham

II.2.4) Description of the procurement

3406/NAMRC/JS/2022 - Flash Analyser for Thermal Diffusivity Measurements

The University of Sheffield wishes to invite tenders for a Flash Analyser for measuring thermal diffusivity on behalf of the Nuclear AMRC at Brunel Way, Catcliffe, Rotherham S60 5WG.

Scope of Requirement:

Use and Description

The Nuclear AMRC (<https://www.namrc.co.uk>) has a requirement for a Flash Analyser for measuring thermal diffusivity to support manufacturing research activities within the nuclear sector. The currently proposed materials characterisation equipment namely, Flash diffusivity technique will add extra capability to Nuclear AMRC's existing materials

testing facility. This capability facilitates measurement of valuable and important parameters such as thermal diffusivity on heat transfer across applied materials to elevated temperatures, Room Temperature (RT - around 20-22 °C) to 1600 °C. For example, thermo-mechanical treatments in steel, heat treatments in steel/alloys and production processes of heat removal materials affect its structural properties. These underlying changes can be assessed by this technique that enables measurement of variations in thermal transport property non-destructively. In addition, the flash technique will be a great tool in analysing and generating experimental thermal database including for (but not limited to) newly developed steels/alloys, ceramics and composites.

The flash diffusivity equipment is to be installed at the Nuclear AMRC's metallurgical laboratory workspace and will be a great addition to already installed Dilatometer and DSC techniques in generating accurate thermophysical /thermodynamic database for advanced nuclear materials from room temperature to 1600 °C.

In the case of heat removal materials property analysis, the thermal diffusivity and specific heat data obtained from this technique in addition to density measurements from our Dilatometer can be combined to estimate the important transport property, i.e. thermal conductivity as a function of temperature. Depending on the thermal history and metallurgical structural changes induced, the variations in transport properties will infer suitable process selection or recommend further improvements on the production process.

In addition, reliable values of thermophysical properties of industrially important materials such as ferrous and non-ferrous, composites, ceramics, heat resistant alloys and other vast range of materials can be assessed using the flash diffusivity method.

II.2.5) Award criteria

Price

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.2.1) Previous publication concerning this procedure

Notice number: [2022/S 000-026466](#)

Section V. Award of contract

A contract/lot is awarded: Yes

V.2) Award of contract

V.2.1) Date of conclusion of the contract

22 November 2022

V.2.2) Information about tenders

Number of tenders received: 3

The contract has been awarded to a group of economic operators: No

V.2.3) Name and address of the contractor

TA Instruments - A Division of Waters Ltd

Wilmslow

Country

United Kingdom

NUTS code

- UKD62 - Cheshire East

Companies House

2912366

The contractor is an SME

No

V.2.4) Information on value of contract/lot (excluding VAT)

Initial estimated total value of the contract/lot: £175,000

Total value of the contract/lot: £174,000

Section VI. Complementary information

VI.4) Procedures for review

VI.4.1) Review body

The High Court of England, Wales and Northern Ireland

London

Country

United Kingdom