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#### Contract

# 3073/JN - Sustainable Aviation Fuels - Innovation Centre: Aviation Characterisation Laboratory Equipment (16 Lots)

UNIVERSITY OF SHEFFIELD

F03: Contract award notice Notice identifier: 2022/S 000-006746 Procurement identifier (OCID): ocds-h6vhtk-02ece0 Published 11 March 2022, 3:59pm

# Section I: Contracting authority

## I.1) Name and addresses

UNIVERSITY OF SHEFFIELD

Western Bank

SHEFFIELD

S102TN

Contact

James Noble

Email

james.noble@sheffield.ac.uk

Country

United Kingdom

NUTS code

UKE32 - Sheffield

## Internet address(es)

Main address

https://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

3073/JN - Sustainable Aviation Fuels - Innovation Centre: Aviation Characterisation Laboratory Equipment (16 Lots)

Reference number

3073/JN

### 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 Sheffield (UoS) with funding from the European Regional Development Fund (ERDF) is establishing a Sustainable Aviation Fuels Innovation Centre (SAF-IC) to support and promote the production and characterisation of decarbonised and sustainable aviation fuel. To complement our research capability, we are looking to procure a range of test equipment approved to various ASTM (American Society for Testing and Materials) standards as well as other internationally recognised standards where appropriate.

### II.1.6) Information about lots

This contract is divided into lots: Yes

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

Value excluding VAT: £331,631.94

# **II.2) Description**

### II.2.1) Title

Automated Water Solubility Test Device - ASTM D6304

Lot No

#### 1

#### II.2.2) Additional CPV code(s)

- 38400000 Instruments for checking physical characteristics
- 38500000 Checking and testing apparatus

#### II.2.3) Place of performance

NUTS codes

• UKE32 - Sheffield

Main site or place of performance

Sustainable Aviation Fuels - Innovation Centre (SAF-IC), Aviation Characterisation Laboratory, Europa Ave, Tinsley, Sheffield

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

In order to complement our research capability in keeping with the aviation fuel aviation characterisation requirements, we are looking to procure an Automated Water Solubility Test Device for precise and reliable aviation fuel testing in agreement with ASTM D6304.

This test method covers the direct determination of entrained water in petroleum products and hydrocarbons using automated instrumentation. This test method also covers the indirect analysis of water thermally removed from samples and swept with dry inert gas into the titration cell. The precision statement of this method covers the nominal range of 20 mg ?kg to 25 000 mg/kg.

#### II.2.5) Award criteria

Quality criterion - Name: Quality / Weighting: 70

Price - Weighting: 30

### II.2.11) Information about options

Options: No

#### II.2.14) Additional information

This procurement is related to a project and/or programme financed by European Union funds.

Identification of the project: European Regional Development Fund (ERDF)

# **II.2) Description**

## II.2.1) Title

Dynamic Viscosity Measurement Device - ASTM D7042

Lot No

2

### II.2.2) Additional CPV code(s)

- 38400000 Instruments for checking physical characteristics
- 38500000 Checking and testing apparatus

#### II.2.3) Place of performance

NUTS codes

• UKE32 - Sheffield

Main site or place of performance

Sustainable Aviation Fuels - Innovation Centre (SAF-IC), Aviation Characterisation Laboratory, Europa Ave, Tinsley, Sheffield

### II.2.4) Description of the procurement

In order to complement our research capability in keeping with the aviation fuel aviation characterisation requirements, we are looking to procure an : Dynamic Viscosity Measurement Device for precise and reliable testing results in keeping with ASTM D7042.

This test method covers and specifies a procedure for the concurrent measurement of both the dynamic viscosity, ?, and the density, ?, of liquid petroleum products and crude oils, both transparent and opaque. The kinematic viscosity, ?, can be obtained by dividing the dynamic viscosity, ?, by the density, ?, obtained at the same test temperature. The result obtained from this test method is dependent upon the behaviour of the sample and is intended for application to liquids for which primarily

the shear stress and shear rate are proportional (Newtonian flow behaviour).

Viscosity decreases with increasing temperature, but the form of the functionality is not as simple as for density. Many mathematical descriptions for viscosity as a function of

temperature have been proposed, and the form of that functionality differs among the models.

## II.2.5) Award criteria

Quality criterion - Name: Quality / Weighting: 70

Price - Weighting: 30

## II.2.11) Information about options

Options: No

## II.2.14) Additional information

This procurement is related to a project and/or programme financed by European Union funds.

Identification of the project: European Regional Development Fund (ERDF)

# **II.2) Description**

## II.2.1) Title

Simulated Distillation Unit based on Gas Chromatography - ASTM D2887 and IP 406

Lot No

### 3

### II.2.2) Additional CPV code(s)

- 38400000 Instruments for checking physical characteristics
- 38500000 Checking and testing apparatus

### II.2.3) Place of performance

NUTS codes

• UKE32 - Sheffield

Main site or place of performance

Sustainable Aviation Fuels - Innovation Centre (SAF-IC), Aviation Characterisation Laboratory, Europa Ave, Tinsley, Sheffield

## II.2.4) Description of the procurement

In order to complement our research capability in keeping with the aviation fuel aviation characterisation requirements, we are looking to procure an Simulated Distillation Unit based on Chromatography for precise and reliable testing results in

keeping with ASTM D2887 and IP 406.

ASTM D2887 covers the determination of the boiling range distribution of petroleum products. Simulated distillation is a GC method used to characterise petroleum fractions and products, since it permits the quick determination of their boiling range distribution. Samples are analysed on a non-polar chromatographic column that separates the hydrocarbons in order of their boiling points. These are correlated with the retention times, through a calibration curve obtained by running under the same conditions a known mixture of hydrocarbons, usually n-alkanes, covering the boiling points and the percentages of the sample eluted from the column. The determination of the boiling range distribution of petroleum fractions by conventional GC is a rapid analytical tool, which is widely used to replace conventional distillation methods for control of refining operations and specification testing.

The test method is applicable to petroleum products and fractions with a final boiling point of 538 °C (1000 °F) or lower at atmospheric pressure as measured by this test method. This test method is limited to samples having a boiling range greater than 55.5 °C (100 °F), and having a vapor pressure sufficiently low to permit sampling at ambient temperature.

### II.2.5) Award criteria

Quality criterion - Name: Quality / Weighting: 70

Price - Weighting: 30

## II.2.11) Information about options

Options: No

## II.2.14) Additional information

This procurement is related to a project and/or programme financed by European Union funds.

Identification of the project: European Regional Development Fund (ERDF)

# **II.2) Description**

## II.2.1) Title

Automated Lubricity Measurement Device - ASTM D5001

Lot No

### 4

### II.2.2) Additional CPV code(s)

- 38400000 Instruments for checking physical characteristics
- 38500000 Checking and testing apparatus

#### II.2.3) Place of performance

NUTS codes

• UKE32 - Sheffield

Main site or place of performance

Sustainable Aviation Fuels - Innovation Centre (SAF-IC), Aviation Characterisation Laboratory, Europa Ave, Tinsley, Sheffield

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

In order to complement our research capability in keeping with the aviation fuel aviation characterisation requirements, we are looking to procure an automated lubricity measurement device for precise and reliable aviation fuel testing in keeping with ASTM D5001.

This test method covers assessment of the wear aspects of the boundary lubrication properties of aviation turbine fuels on rubbing steel surfaces. This test method incorporates two procedures, one using a semi automated and the second is a fully automated. We are seeking to purchase the second option, the fully automated instrument.

### II.2.5) Award criteria

Quality criterion - Name: Quality / Weighting: 70

Price - Weighting: 30

### II.2.11) Information about options

Options: No

#### II.2.14) Additional information

This procurement is related to a project and/or programme financed by European Union funds.

Identification of the project: European Regional Development Fund (ERDF)

## **II.2) Description**

#### II.2.1) Title

Automated Test Device for Determining Specific Heat Capacity by Differential Scanning Calorimetry - ASTM E1269

Lot No

5

#### II.2.2) Additional CPV code(s)

- 38400000 Instruments for checking physical characteristics
- 38500000 Checking and testing apparatus

#### II.2.3) Place of performance

NUTS codes

• UKE32 - Sheffield

Main site or place of performance

Sustainable Aviation Fuels - Innovation Centre (SAF-IC), Aviation Characterisation Laboratory, Europa Ave, Tinsley, Sheffield

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

In order to complement our research capability in keeping with the aviation fuel aviation characterisation requirements, we are looking to procure an automated test device for determining specific heat by Differential Scanning Calorimetry for precise and reliable aviation fuel testing in keeping with ASTM E1269.

The specific heat of a fuel is the amount of heat-energy transferred into or out of a unit mass of the fuel when increasing or decreasing its temperature. In fuel system analysis, specific heats are used in the calculation of heat transfer, using the fuel as a coolant or as a heat sink. Specific heat is given in terms of kilojoules per kilogram.

This test method covers the determination of specific heat capacity by differential scanning calorimetry. This test method is generally applicable to thermally stable solids and liquids. The normal operating range of the test is from -100 600 °C. The temperature range can be extended depending on instrumentation and sample.

### II.2.5) Award criteria

Quality criterion - Name: Quality / Weighting: 70

Price - Weighting: 30

#### II.2.11) Information about options

Options: No

#### II.2.14) Additional information

This procurement is related to a project and/or programme financed by European Union funds.

Identification of the project: European Regional Development Fund (ERDF)

# **II.2) Description**

### II.2.1) Title

Automated Freeze Point Test Device - ASTM D2386

Lot No

#### 6

### II.2.2) Additional CPV code(s)

- 38400000 Instruments for checking physical characteristics
- 38500000 Checking and testing apparatus

#### II.2.3) Place of performance

NUTS codes

• UKE32 - Sheffield

Main site or place of performance

Sustainable Aviation Fuels - Innovation Centre (SAF-IC), Aviation Characterisation Laboratory, Europa Ave, Tinsley, Sheffield

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

In order to complement our research capability in keeping with the aviation fuel aviation characterisation requirements, we are looking to procure an Automated Freeze Point Test Device for precise and reliable aviation fuel testing in agreement with ASTM D2386.

This test method covers the determination of the temperature below which solid hydrocarbon crystals may form in aviation turbine fuels and aviation gasoline. If no crystallization point or freezing point can be measured, this test can be used to report the lowest measurable temperature reached before the crystallization point.

#### II.2.5) Award criteria

Quality criterion - Name: Quality / Weighting: 70

Price - Weighting: 30

### II.2.11) Information about options

Options: No

### II.2.14) Additional information

This procurement is related to a project and/or programme financed by European Union funds.

Identification of the project: European Regional Development Fund (ERDF)

# **II.2) Description**

### II.2.1) Title

Automated Flash Point Test Device - ASTM D56, ASTM D3828 or ASTM D93

Lot No

7

#### II.2.2) Additional CPV code(s)

- 38400000 Instruments for checking physical characteristics
- 38500000 Checking and testing apparatus

#### II.2.3) Place of performance

NUTS codes

• UKE32 - Sheffield

Main site or place of performance

Sustainable Aviation Fuels - Innovation Centre (SAF-IC), Aviation Characterisation Laboratory, Europa Ave, Tinsley, Sheffield

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

In order to complement our research capability in keeping with the aviation fuel aviation characterisation requirements, we are looking to procure an automated flash point test device for precise and reliable aviation fuel testing in keeping with ASTM D56. ASTM D3828 or ASTM D93.

This test method covers procedures for flash point tests, within the range of -30  $^{\circ}$  C to 300  $^{\circ}$  C of petroleum liquid products and bio-derived fuels biodiesel such as biodiesel, etc. The procedure may be used to determine, whether a product will or will not flash at specific.

#### II.2.5) Award criteria

Quality criterion - Name: Quality / Weighting: 70

Price - Weighting: 30

#### II.2.11) Information about options

Options: No

### II.2.14) Additional information

This procurement is related to a project and/or programme financed by European Union funds.

Identification of the project: European Regional Development Fund (ERDF)

# **II.2) Description**

## II.2.1) Title

Digital Density Meter - ASTM D4052

Lot No

## 8

### II.2.2) Additional CPV code(s)

- 38400000 Instruments for checking physical characteristics
- 38500000 Checking and testing apparatus

#### II.2.3) Place of performance

NUTS codes

• UKE32 - Sheffield

Main site or place of performance

Sustainable Aviation Fuels - Innovation Centre (SAF-IC), Aviation Characterisation Laboratory, Europa Ave, Tinsley, Sheffield

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

In order to complement our research capability in keeping with the aviation fuel aviation characterisation requirements, we are looking to procure an Digital Density Meter for precise and reliable testing results in keeping with ASTM D4052.

This test method covers the determination of the density, relative density, and API Gravity of petroleum products and viscous oils, which can be handled as liquids at the temperature of test, using either manual or automated sample injection equipment. However, what we are seeking to buy is an automated sample injection device. The application of this method is restricted to liquids with total vapor pressure below approximately 15 000 mm2/s at the temperature of test. The total vapor pressure limitation however can be extended to >100 kPa provided that it is first ascertained that no bubbles form in the U-tube, which can affect the density determination. Some examples of products that may be tested by this procedure include: gasoline and gasoline-oxygenate blends, diesel, jet, basestocks, waxes, and lubricating oils. Density is the mass per unit volume relationship of fluids. Generally, relative density is the ratio of the density of a particular liquid fuel to the density of water at 15.5 °C and is commonly referred to as specific gravity. These relationships are important in the design of aircraft and missiles,

since fuel density variations can have significant impact on determining loaded weight and the range attainable. They are also used in flow calculations, fuel gaging, metering device considerations, fuel loading, thermal expansion of fuels, and fuel tank design. Temperature has a marked and inverse effect on the density of fuels. As the temperature increases, the density of a fuel decreases. Relative density, or specific gravity, is dimensionless since it is a ratio of the density of a substance to the density of a reference substance, namely water. Density varies with temperature therefore the temperature of the liquid being compared to the reference substance and the temperature of the reference substance, itself, must be given. Relative density can also be expressed in terms of American Petroleum Institute (API) gravity.

## II.2.5) Award criteria

Quality criterion - Name: Quality / Weighting: 70

Price - Weighting: 30

### II.2.11) Information about options

Options: No

### II.2.14) Additional information

This procurement is related to a project and/or programme financed by European Union funds.

Identification of the project: European Regional Development Fund (ERDF)

# **II.2) Description**

### II.2.1) Title

Conductivity Response - ASTM D2624

Lot No

### 9

### II.2.2) Additional CPV code(s)

- 38400000 Instruments for checking physical characteristics
- 38500000 Checking and testing apparatus

### II.2.3) Place of performance

NUTS codes

• UKE32 - Sheffield

Main site or place of performance

Sustainable Aviation Fuels - Innovation Centre (SAF-IC), Aviation Characterisation Laboratory, Europa Ave, Tinsley, Sheffield

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

In order to complement our research capability in keeping with the aviation fuel aviation characterisation requirements, we are looking to procure an automated conductivity response device for precise and reliable aviation fuel testing in agreement with ASTM D2624.

These test methods cover the determination of the electrical conductivity of aviation fuels and liquid distillates with and/or without a static dissipator additive. The test methods normally give a measurement of the conductivity when the fuel is uncharged, that is, electrically at rest (known as the rest conductivity). Two test methods are available for field tests of fuel conductivity. These are: (1) portable meters for the direct measurement in tanks or the field or laboratory measurement of fuel samples, and (2) in-line meters for the continuous measurement of fuel conductivities in a fuel distribution system. In using portable meters, care must be taken in allowing the relaxation of residual electrical charges before measurement and in preventing fuel contamination.

#### II.2.5) Award criteria

Quality criterion - Name: Quality / Weighting: 70

Price - Weighting: 30

#### II.2.11) Information about options

Options: No

#### II.2.14) Additional information

This procurement is related to a project and/or programme financed by European Union funds.

Identification of the project: European Regional Development Fund (ERDF)

## **II.2) Description**

### II.2.1) Title

Automated Atmospheric Distillation Analyser - ASTM D86, IP 123, ASTM D7344 and ASTM D7345

Lot No

10

#### II.2.2) Additional CPV code(s)

- 38400000 Instruments for checking physical characteristics
- 38500000 Checking and testing apparatus

#### II.2.3) Place of performance

NUTS codes

• UKE32 - Sheffield

Main site or place of performance

Sustainable Aviation Fuels - Innovation Centre (SAF-IC), Aviation Characterisation Laboratory, Europa Ave, Tinsley, Sheffield

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

In order to complement our research capability in keeping with the aviation fuel aviation characterisation requirements, we are looking to procure an Automated Atmospheric Distillation Analyser for precise and reliable testing results in order to correlate with various testing standards such as ASTM D86, IP 123, ASTM D7344 and ASTM D7345

Distillation analyser is used to measure the boiling points of the various products such as gasoline, jet fuel, diesel products, biofuel, solvents, aromatics, organic liquid, and chemicals. Distillation analysis is the process of separating the components or substance from a liquid mixture by using selective boiling points and condensation. Distillation analyser should facilitate the process of distillation analysis by providing a broad range of temperature for measurement with sample inlet and outlet facility. Features such as true atmospheric distillation, and automatic temperature control, built-in pressure sensor, automatic barometric correction, and extensive connectivity makes distillation analyser user-friendly. Furthermore, portability, and remote access via the Internet ultimately eases the process of distillation analysis. Easy operating and accurate distillation testing results due to technological advancement is one of the vital factors that we are considering in our decision.

#### II.2.5) Award criteria

Quality criterion - Name: Quality / Weighting: 70

Price - Weighting: 30

#### II.2.11) Information about options

Options: No

#### II.2.14) Additional information

This procurement is related to a project and/or programme financed by European Union funds.

Identification of the project: European Regional Development Fund (ERDF)

## **II.2) Description**

#### II.2.1) Title

Automated Vapor Pressure Device - ASTM D6378

Lot No

11

#### II.2.2) Additional CPV code(s)

- 38400000 Instruments for checking physical characteristics
- 38500000 Checking and testing apparatus

#### II.2.3) Place of performance

NUTS codes

• UKE32 - Sheffield

Main site or place of performance

Sustainable Aviation Fuels - Innovation Centre (SAF-IC), Aviation Characterisation Laboratory, Europa Ave, Tinsley, Sheffield

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

In order to complement our research capability in keeping with the aviation fuel aviation characterisation requirements, we are looking to procure an Automated Vapor Pressure Device for precise and reliable aviation fuel testing in keeping with ASTM D6378.

This test method covers the use of automated vapor pressure instruments to determine the vapor pressure exerted in vacuum by volatile, liquid petroleum products, hydrocarbons, and hydrocarbon-oxygenate mixtures including ethanol blends up to 85 % (volume fraction). This test method is suitable for testing samples with boiling points above 0 °C (32 °F) that exert a vapor pressure between 7 kPa and 150 kPa (1.0 psi and 21 psi) at 37.8 °C (100 °F) at a vapor-to-liquid ratio of 4:1.

## II.2.5) Award criteria

Quality criterion - Name: Quality / Weighting: 70

Price - Weighting: 30

### II.2.11) Information about options

Options: No

### II.2.14) Additional information

This procurement is related to a project and/or programme financed by European Union funds.

Identification of the project: European Regional Development Fund (ERDF)

# **II.2) Description**

### II.2.1) Title

Automated Total Acid Number - ASTM D664

Lot No

12

### II.2.2) Additional CPV code(s)

- 38400000 Instruments for checking physical characteristics
- 38500000 Checking and testing apparatus

### II.2.3) Place of performance

NUTS codes

• UKE32 - Sheffield

Main site or place of performance

Sustainable Aviation Fuels - Innovation Centre (SAF-IC), Aviation Characterisation Laboratory, Europa Ave, Tinsley, Sheffield

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

In order to complement our research capability in keeping with the aviation fuel aviation characterisation requirements, we are looking to procure an automated device for total acid number for precise and reliable aviation fuel testing in agreement with ASTM D664.

This test method covers procedures for the determination of acidic constituents in petroleum products, lubricants, biodiesel, and blends of biodiesel. The test method may be used to indicate relative changes that occur in oil during use under oxidizing conditions regardless of the colour or other properties of the resulting oil. Although the titration is made under definite equilibrium conditions, the test method is not intended to measure an absolute acidic property that can be used to predict performance of oil under service conditions.

#### II.2.5) Award criteria

Quality criterion - Name: Quality / Weighting: 70

Price - Weighting: 30

#### II.2.11) Information about options

Options: No

#### II.2.14) Additional information

This procurement is related to a project and/or programme financed by European Union funds.

Identification of the project: European Regional Development Fund (ERDF)

## **II.2) Description**

### II.2.1) Title

Automated Tensiometer - ASTM D1331

Lot No

13

#### II.2.2) Additional CPV code(s)

- 38400000 Instruments for checking physical characteristics
- 38500000 Checking and testing apparatus

#### II.2.3) Place of performance

NUTS codes

• UKE32 - Sheffield

Main site or place of performance

Sustainable Aviation Fuels - Innovation Centre (SAF-IC), Aviation Characterisation Laboratory, Europa Ave, Tinsley, Sheffield

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

In order to complement our research capability in keeping with the aviation fuel aviation characterisation requirements, we are looking to procure an automated Tensiometer for precise and reliable aviation fuel testing in keeping with ASTM D1331.

Surface tension is a measurement of the cohesive energy present at an interface. Values for surface tension are usually given when the surface of the liquid is in contact with air. This understanding is important in two key fuel areas:

- The movement of gas (air) into and out of turbine fuel
- The movement of turbine fuel into airstreams by atomization

The same concepts apply when the interface is between two liquids, where it is typically called interfacial tension. This is important to the movement of water into and out of turbine fuel, and is a key topic in fuel handling and cleanliness. Fluids with large cohesive forces among molecules, like those found in water, exhibit high surface tensions. Non polar fluids such as hydrocarbons have lower internal cohesive forces and lower surface tensions. Surface tension decreases toward zero as temperature increases, and cohesive forces are overcome until, at the fluid's critical temperature, surface tension becomes negligible.

#### II.2.5) Award criteria

Quality criterion - Name: Quality / Weighting: 70

Price - Weighting: 30

### II.2.11) Information about options

Options: No

#### II.2.14) Additional information

This procurement is related to a project and/or programme financed by European Union funds.

Identification of the project: European Regional Development Fund (ERDF)

# **II.2) Description**

#### II.2.1) Title

Automated Trace Sulphur Analyser - ASTM D5453

Lot No

14

#### II.2.2) Additional CPV code(s)

- 38400000 Instruments for checking physical characteristics
- 38500000 Checking and testing apparatus

#### II.2.3) Place of performance

NUTS codes

• UKE32 - Sheffield

Main site or place of performance

Sustainable Aviation Fuels - Innovation Centre (SAF-IC), Aviation Characterisation Laboratory, Europa Ave, Tinsley, Sheffield

### II.2.4) Description of the procurement

In order to complement our research capability in keeping with the aviation fuel aviation characterisation requirements, we are looking to procure an automated trace sulphur

analyser for precise and reliable aviation fuel testing in agreement with ASTM D5453.

This test method covers the determination of total sulphur in liquid hydrocarbons, boiling in the range from approximately 25°C to 400 °C, with viscosities between approximately 0.2 cSt and 20 cSt (mm2/s) at room temperature.

#### II.2.5) Award criteria

Quality criterion - Name: Quality / Weighting: 70

Price - Weighting: 30

#### II.2.11) Information about options

Options: No

#### II.2.14) Additional information

This procurement is related to a project and/or programme financed by European Union funds.

Identification of the project: European Regional Development Fund (ERDF)

### **II.2)** Description

#### II.2.1) Title

Automated Smoke Point Analyser - ASTM D1322

Lot No

15

#### II.2.2) Additional CPV code(s)

- 38400000 Instruments for checking physical characteristics
- 38500000 Checking and testing apparatus

#### II.2.3) Place of performance

NUTS codes

• UKE32 - Sheffield

Main site or place of performance

Sustainable Aviation Fuels - Innovation Centre (SAF-IC), Aviation Characterisation Laboratory, Europa Ave, Tinsley, Sheffield

## II.2.4) Description of the procurement

In order to complement our research capability in keeping with the aviation fuel aviation characterisation requirements, we are looking to procure an automated smoke point analyser for precise and reliable aviation fuel testing in agreement with ASTM D1322.

This test method covers two procedures for determination of the smoke point of kerosene and aviation turbine fuel, a manual procedure and an automated procedure, which give results with different precision. We are seeking to purchase the automated device. This test method provides an indication of the relative smoke producing properties of kerosenes and aviation turbine fuels in a diffusion flame. The smoke point is related to the hydrocarbon type composition of such fuels. Generally the more aromatic the fuel the smokier the flame. A high smoke point indicates a fuel of low smoke producing tendency.

### II.2.5) Award criteria

Quality criterion - Name: Quality / Weighting: 70

Price - Weighting: 30

### II.2.11) Information about options

Options: No

### II.2.14) Additional information

This procurement is related to a project and/or programme financed by European Union funds.

Identification of the project: European Regional Development Fund (ERDF)

## **II.2) Description**

### II.2.1) Title

Automated Vapor Pressure Device - ASTM D6378

Lot No

16

#### II.2.2) Additional CPV code(s)

- 38400000 Instruments for checking physical characteristics
- 38500000 Checking and testing apparatus

#### II.2.3) Place of performance

NUTS codes

• UKE32 - Sheffield

Main site or place of performance

Sustainable Aviation Fuels - Innovation Centre (SAF-IC), Aviation Characterisation Laboratory, Europa Ave, Tinsley, Sheffield

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

In order to complement our research capability in keeping with the aviation fuel aviation characterisation requirements, we are looking to procure an Automated Vapor Pressure Device for precise and reliable aviation fuel testing in keeping with ASTM D6378.

This test method covers the use of automated vapor pressure instruments to determine the vapor pressure exerted in vacuum by volatile, liquid petroleum products, hydrocarbons, and hydrocarbon-oxygenate mixtures including ethanol blends up to 85 % (volume fraction). This test method is suitable for testing samples with boiling points above 0 °C (32 °F) that exert a vapor pressure between 7 kPa and 150 kPa (1.0 psi and 21 psi) at 37.8 °C (100 °F) at a vapor-to-liquid ratio of 4:1.

#### II.2.5) Award criteria

Quality criterion - Name: Quality / Weighting: 70

Price - Weighting: 30

#### II.2.11) Information about options

Options: No

### II.2.14) Additional information

This procurement is related to a project and/or programme financed by European Union funds.

Identification of the project: European Regional Development Fund (ERDF)

# **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: 2021/S 000-025971

# Section V. Award of contract

# **Contract No**

3073/JN

## Lot No

1

# Title

Automated Water Solubility Test Device - ASTM D6304

A contract/lot is awarded: Yes

# V.2) Award of contract

## V.2.1) Date of conclusion of the contract

17 February 2022

### V.2.2) Information about tenders

Number of tenders received: 1

Number of tenders received from SMEs: 1

Number of tenders received by electronic means: 1

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

#### V.2.3) Name and address of the contractor

Metrohm UK Ltd

Metrohm House, Evenwood Close, Daresbury Court

Runcorn

WA7 1LZ

Country

United Kingdom

NUTS code

• UKD6 - Cheshire

The contractor is an SME

Yes

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

Initial estimated total value of the contract/lot: £16,000

Total value of the contract/lot: £15,199.41

# Section V. Award of contract

# **Contract No**

3073/JN

# Lot No

2

# Title

Dynamic Viscosity Measurement Device - ASTM D7042

A contract/lot is awarded: Yes

## V.2) Award of contract

### V.2.1) Date of conclusion of the contract

18 February 2022

### V.2.2) Information about tenders

Number of tenders received: 1

Number of tenders received from SMEs: 1

Number of tenders received by electronic means: 1

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

### V.2.3) Name and address of the contractor

Anton Paar Ltd

Unit F The Courtyard

St Albans

AL4 0LA

Country

## United Kingdom

#### NUTS code

• UKH23 - Hertfordshire

The contractor is an SME

Yes

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

Initial estimated total value of the contract/lot: £44,000

Total value of the contract/lot: £40,787

# Section V. Award of contract

# **Contract No**

3073/JN

## Lot No

3

## Title

Simulated Distillation Unit based on Gas Chromatography - ASTM D2887 and IP 406

A contract/lot is awarded: No

## V.1) Information on non-award

The contract/lot is not awarded

No tenders or requests to participate were received or all were rejected

# Section V. Award of contract

# **Contract No**

3073/JN

# Lot No

4

# Title

Automated Lubricity Measurement Device - ASTM D5001

A contract/lot is awarded: Yes

## V.2) Award of contract

### V.2.1) Date of conclusion of the contract

17 February 2022

### V.2.2) Information about tenders

Number of tenders received: 1

Number of tenders received from SMEs: 1

Number of tenders received by electronic means: 1

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

### V.2.3) Name and address of the contractor

SciMed Ltd

Unit B4, Embankment Business Park, Vale Road

Heaton Mersey

SK4 3GN

Country

## United Kingdom

#### NUTS code

• UKD3 - Greater Manchester

The contractor is an SME

Yes

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

Initial estimated total value of the contract/lot: £13,000

Total value of the contract/lot: £69,861

# Section V. Award of contract

# **Contract No**

3073/JN

# Lot No

5

# Title

Automated Test Device for Determining Specific Heat Capacity by Differential Scanning Calorimetry - ASTM E1269

A contract/lot is awarded: No

# V.1) Information on non-award

The contract/lot is not awarded

No tenders or requests to participate were received or all were rejected

# Section V. Award of contract

# **Contract No**

3073/JN

# Lot No

6

# Title

Automated Freeze Point Test Device - ASTM D2386

A contract/lot is awarded: Yes

# V.2) Award of contract

### V.2.1) Date of conclusion of the contract

17 February 2022

### V.2.2) Information about tenders

Number of tenders received: 1

Number of tenders received from SMEs: 1

Number of tenders received by electronic means: 1

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

### V.2.3) Name and address of the contractor

Integrated Scientific Ltd

Unit 3 Aspen Court, Centurion Business Park

Rotherham

S60 1FB

Country

## United Kingdom

#### NUTS code

• UKE31 - Barnsley, Doncaster and Rotherham

The contractor is an SME

Yes

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

Initial estimated total value of the contract/lot: £11,000

Total value of the contract/lot: £42,715

# Section V. Award of contract

# **Contract No**

3073/JN

# Lot No

7

# Title

Automated Flash Point Test Device - ASTM D56, ASTM D3828 or ASTM D93

A contract/lot is awarded: Yes

# V.2) Award of contract

## V.2.1) Date of conclusion of the contract

18 February 2022

### V.2.2) Information about tenders

Number of tenders received: 2

Number of tenders received from SMEs: 2

Number of tenders received by electronic means: 2

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

#### V.2.3) Name and address of the contractor

Anton Paar Ltd

Unit F The Courtyard

St Albans

AL4 0LA

Country

United Kingdom

NUTS code

• UKH23 - Hertfordshire

The contractor is an SME

Yes

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

Initial estimated total value of the contract/lot: £21,000

Total value of the contract/lot: £18,400

# Section V. Award of contract

# **Contract No**

3073/JN

# Lot No

8

# Title

Digital Density Meter - ASTM D4052

A contract/lot is awarded: Yes

# V.2) Award of contract

## V.2.1) Date of conclusion of the contract

18 February 2022

## V.2.2) Information about tenders

Number of tenders received: 2

Number of tenders received from SMEs: 2

Number of tenders received by electronic means: 2

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

### V.2.3) Name and address of the contractor

Anton Paar Ltd

Unit F The Courtyard

St Albans

AL4 0LA

Country

## United Kingdom

#### NUTS code

• UKH23 - Hertfordshire

The contractor is an SME

Yes

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

Initial estimated total value of the contract/lot: £75,000

Total value of the contract/lot: £18,882

# Section V. Award of contract

# **Contract No**

3073/JN

# Lot No

9

# Title

Conductivity Response - ASTM D2624

A contract/lot is awarded: No

# V.1) Information on non-award

The contract/lot is not awarded

No tenders or requests to participate were received or all were rejected

# Section V. Award of contract

# **Contract No**

3073/JN

# Lot No

10

# Title

Automated Atmospheric Distillation Analyser - ASTM D86, IP 123, ASTM D7344 and ASTM D7345

A contract/lot is awarded: Yes

# V.2) Award of contract

### V.2.1) Date of conclusion of the contract

18 February 2022

### V.2.2) Information about tenders

Number of tenders received: 2

Number of tenders received from SMEs: 2

Number of tenders received by electronic means: 2

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

### V.2.3) Name and address of the contractor

Anton Paar Ltd

Unit F The Courtyard

St Albans

AL4 0LA

Country

## United Kingdom

#### NUTS code

• UKH23 - Hertfordshire

The contractor is an SME

Yes

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

Initial estimated total value of the contract/lot: £30,000

Total value of the contract/lot: £29,248

# Section V. Award of contract

# **Contract No**

3073/JN

# Lot No

11

# Title

Automated Vapor Pressure Device - ASTM D6378

A contract/lot is awarded: No

# V.1) Information on non-award

The contract/lot is not awarded

No tenders or requests to participate were received or all were rejected

# Section V. Award of contract

# **Contract No**

3073/JN

# Lot No

12

# Title

Automated Total Acid Number - ASTM D664

A contract/lot is awarded: Yes

# V.2) Award of contract

## V.2.1) Date of conclusion of the contract

17 February 2022

### V.2.2) Information about tenders

Number of tenders received: 1

Number of tenders received from SMEs: 1

Number of tenders received by electronic means: 1

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

### V.2.3) Name and address of the contractor

Metrohm UK Ltd

Metrohm House, Evenwood Close, Daresbury Court

Runcorn

WA7 1LZ

Country

## United Kingdom

NUTS code

• UKD6 - Cheshire

The contractor is an SME

Yes

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

Initial estimated total value of the contract/lot: £45,000

Total value of the contract/lot: £25,758.63

# Section V. Award of contract

## **Contract No**

3073/JN

## Lot No

13

## Title

Automated Tensiometer - ASTM D1331

A contract/lot is awarded: No

## V.1) Information on non-award

The contract/lot is not awarded

No tenders or requests to participate were received or all were rejected

# Section V. Award of contract

# **Contract No**

3073/JN

# Lot No

14

# Title

Automated Trace Sulphur Analyser - ASTM D5453

A contract/lot is awarded: Yes

# V.2) Award of contract

## V.2.1) Date of conclusion of the contract

17 February 2022

## V.2.2) Information about tenders

Number of tenders received: 1

Number of tenders received from SMEs: 1

Number of tenders received by electronic means: 1

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

### V.2.3) Name and address of the contractor

Integrated Scientific Ltd

Unit 3 Aspen Court, Centurion Business Park

Rotherham

S60 1FB

Country

## United Kingdom

#### NUTS code

• UKE31 - Barnsley, Doncaster and Rotherham

The contractor is an SME

Yes

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

Initial estimated total value of the contract/lot: £34,000

Total value of the contract/lot: £54,942.50

# Section V. Award of contract

# **Contract No**

3073/JN

# Lot No

15

## Title

Automated Smoke Point Analyser - ASTM D1322

A contract/lot is awarded: No

# V.1) Information on non-award

The contract/lot is not awarded

No tenders or requests to participate were received or all were rejected

# Section V. Award of contract

# **Contract No**

3073/JN

# Lot No

16

# Title

Automated Vapor Pressure Device - ASTM D6378

A contract/lot is awarded: Yes

# V.2) Award of contract

### V.2.1) Date of conclusion of the contract

17 February 2022

### V.2.2) Information about tenders

Number of tenders received: 1

Number of tenders received from SMEs: 1

Number of tenders received by electronic means: 1

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

### V.2.3) Name and address of the contractor

Integrated Scientific Ltd

Unit 3 Aspen Court, Centurion Business Park

Rotherham

S60 1FB

Country

## United Kingdom

#### NUTS code

• UKE31 - Barnsley, Doncaster and Rotherham

The contractor is an SME

Yes

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

Initial estimated total value of the contract/lot: £24,000

Total value of the contract/lot: £15,838.40

# Section VI. Complementary information

# VI.4) Procedures for review

#### VI.4.1) Review body

The University of Sheffield

Arts Tower

Sheffield

S10 2TN

Email

james.noble@sheffield.ac.uk

Country

United Kingdom

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

The University of Sheffield

Arts Tower

Sheffield

S10 2TN

Email

james.noble@sheffield.ac.uk

Country

United Kingdom