
**Finland-Espoo: Laboratory, optical and precision equipments (excl. glasses)
2023/S 160-507402**

Contract notice

Supplies

Legal Basis:

Directive 2014/24/EU

Section I: Contracting authority

I.1) Name and addresses

Official name: VTT Technical Research Centre of Finland Ltd

National registration number: 2647375-4

Postal address: P.O. Box 1000, VTT

Town: Espoo

NUTS code: FI1 Manner-Suomi

Postal code: 02044

Country: Finland

E-mail:

Telephone: +358 20722111

Internet address(es):

Main address:

I.3) Communication

The procurement documents are available for unrestricted and full direct access

Additional information can be obtained from the abovementioned address

Tenders or requests to participate must be submitted electronically

I.4) Type of the contracting authority

Body governed by public law

I.5) Main activity

Other activity: Research and development

Section II: Object

II.1) Scope of the procurement

II.1.1) Title:

Triple quadrupole mass spectrometer, ICP-MS/MS

Reference number: Reg. no 43/206/2023

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 object of the tender process is Triple quadrupole mass spectrometer ICP-MS/MS.

Basic use of a mass spectrometer is to analyze element concentrations in a sample based on the mass-to-charge ratios of the ionized elements. There are several different types of mass-spectrometers available that differ in methods of sample introduction and analysis type. The required mass spectrometer in this procurement is a triple quadrupole mass spectrometer: ICP-MS/MS

The intended use of the triple quadrupole mass spectrometer is for the analysis of hard to determine radionuclides and trace element analysis in the semiconductor industry. Procured mass spectrometer must fulfill the requirements set for these types of analyses.

A triple quadrupole ICP-MS (Inductively Coupled Plasma Mass Spectrometer) is a type of mass spectrometer that uses a combination of three quadrupole mass filters to separate and analyze ions based on their mass-to-charge ratio (m/z). The instrument consists of an ion source, a mass analyzer, and a detector. The ion source generates a plasma by ionizing a sample using an inductively coupled plasma (ICP) source. The plasma produces a stream of ions that are extracted and focused into a beam using a series of lenses and skimmers. The ions are then introduced into the first quadrupole mass filter, which acts as a mass analyzer and selects ions of a specific mass-to-charge ratio (m/z) to pass through to the second quadrupole. In the second quadrupole, the selected ions are further filtered based on their m/z ratio, and only ions of a specific m/z ratio are allowed to pass through to the third quadrupole. The third quadrupole acts as a collision cell, where the selected ions are fragmented by collision with a gas, typically oxygen, helium or argon. The resulting fragments are then analyzed by the third quadrupole, which selects ions of a specific m/z ratio to pass through to the detector.

The detector measures the number of ions that reach it and generates a signal that is proportional to the concentration of the element in the sample. The signal is then processed by a computer to generate a mass spectrum, which shows the relative abundance of ions at different m/z ratios.

The object of the tender process is described in more detail in the invitation to tender documents.

II.1.5) **Estimated total value**

II.1.6) **Information about lots**

This contract is divided into lots: no

II.2) **Description**

II.2.3) **Place of performance**

NUTS code: FI1 Manner-Suomi

II.2.4) **Description of the procurement:**

The object of the tender process is Triple quadrupole mass spectrometer ICP-MS/MS (later also "Equipment").

Basic use of a mass spectrometer is to analyze element concentrations in a sample based on the mass-to-charge ratios of the ionized elements. There are several different types of mass-spectrometers available that differ in methods of sample introduction and analysis type. The required mass spectrometer in this procurement is a triple quadrupole mass spectrometer: ICP-MS/MS

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II.2.5) Award criteria

Price is not the only award criterion and all criteria are stated only in the procurement documents

II.2.6) Estimated value

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

Duration in months: 12

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

II.2.14) Additional information

Section III: Legal, economic, financial and technical information

III.1) Conditions for participation

III.1.1) Suitability to pursue the professional activity, including requirements relating to enrolment on professional or trade registers

List and brief description of conditions:

As stated in the invitation to tender documents.

III.1.2) Economic and financial standing

List and brief description of selection criteria:

Selection criteria as stated in the invitation to tender documents

III.1.3) Technical and professional ability

List and brief description of selection criteria:

Selection criteria as stated in the invitation to tender documents

III.2) Conditions related to the contract

III.2.2) Contract performance conditions:

As stated in the invitation to tender documents.

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

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- 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: 21/09/2023
Local time: 12:00
- IV.2.3) **Estimated date of dispatch of invitations to tender or to participate to selected candidates**
- 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**
Tender must be valid until: 31/12/2023
- IV.2.7) **Conditions for opening of tenders**
Date: 21/09/2023
Local time: 12:30
Information about authorised persons and opening procedure:
The given date is preliminary. VTT reserves the right to change the scheduled date and time.
The opening of tenders shall not be a public event.

Section VI: Complementary information

- VI.1) **Information about recurrence**
This is a recurrent procurement: no
- VI.3) **Additional information:**
This notice has links and/or attachments listed
- VI.4) **Procedures for review**
- VI.4.1) **Review body**
Official name: Markkinaoikeus
Postal address: Radanrakentajantie 5
Town: Helsinki
Postal code: 00520
Country: Finland
E-mail:
Telephone: +358 295643300
Internet address:
- VI.5) **Date of dispatch of this notice:**
17/08/2023