

Netherlands-Leiden: Mass spectrometer
OJ S 183/2023 22/09/2023
Contract notice
Supplies

Legal Basis:

Directive 2014/24/EU

Section I: Contracting authority

I.1. Name and addresses

Official name: Universiteit Leiden
National registration number: 27368929
Postal address: Kolffpad 1
Town: Leiden
NUTS code: NL33 Zuid-Holland
Postal code: 2333BN
Country: Netherlands
Contact person: Govert Schipperheijn
E-mail: g.m.schipperheijn@ufb.leidenuniv.nl
Telephone: +31 715273304
Internet address(es):
Main address: www.universiteitleiden.nl
Address of the buyer profile: <https://s2c.mercell.com/buyer/19549>

I.3. Communication

The procurement documents are available for unrestricted and full direct access, free of charge, at: <https://s2c.mercell.com/today/50787>
Additional information can be obtained from the abovementioned address
Tenders or requests to participate must be submitted electronically via: <https://s2c.mercell.com/today/50787>

I.4. Type of the contracting authority

Body governed by public law

I.5. Main activity

Other activity: Higher education and scientific research

Section II: Object

II.1. Scope of the procurement

II.1.1. Title

Inductively Coupled Plasma Mass Spectrometer

II.1.2. Main CPV code

38433100 Mass spectrometer - FG11

II.1.3. Type of contract

Supplies

II.1.4. Short description

The Leiden Institute of Chemistry wishes to purchase an ICP-MS setup (Inductively Coupled Plasma Mass Spectrometer) for its electrochemistry lab. The primary purpose of this setup is to detect and measure the concentration of ions and nanoparticles within the electrolyte of electrochemical cells very low concentrations (ppt-ppq). This requires unique capabilities and accuracy, that can only be provided by the highly sophisticated and state-of-the art design.

II.1.5. Estimated total value

Value excluding VAT: 260 000,00 EUR

II.1.6. Information about lots

This contract is divided into lots: no

II.2. Description

II.2.2. Additional CPV code(s)

38433000 Spectrometers - FG11

II.2.3. Place of performance

NUTS code: NL33 Zuid-Holland

Main site or place of performance: Leiden, The Netherlands

II.2.4. Description of the procurement

The Leiden Institute of Chemistry wishes to purchase an ICP-MS setup (Inductively Coupled Plasma Mass Spectrometer) for its electrochemistry lab. The primary purpose of this setup is to detect and measure the concentration of ions and nanoparticles within the electrolyte of electrochemical cells very low concentrations (ppt-ppq). This requires unique capabilities and accuracy, that can only be provided by the highly sophisticated and state-of-the art design. Our ICP-MS instrument is intended to be used in series with an electrochemical flow cell, where it can measure and detect the concentrations of the metal ions being introduced into the electrolyte in real-time. The main application would be to measure very low concentrations of metal ions and nanoparticles that come off of the electrode during corrosion in aqueous electrolytes containing high concentration of salts/acids. For the instrument to produce consistent measurements in terms of both concentration of the investigated species as well as the nano-particle size, it should not only have very low and accurate detection limits (ppt-ppq), but also be able to eliminate interference from undesired species and water vapors as much as possible. In addition, the instrument should be able to deal with the high salt concentrations in the electrolytes with minimal maintenance requirements

In addition to that, the ICPMS setup will assist in a wide range of research areas performed by different research groups in the institute including Bio-organic synthesis to catalysis & surface chemistry and supramolecular & biomaterials chemistry. Keeping that in mind, the instrument to be procured is desired to be not only versatile but also user friendly and requiring minimum maintenance and downtime.

Regarding maintenance, the RF coil that ionizes the sample should be corrosion-resistant design, which is crucial for the strong acids and bases used in our application. Second, the instrument should be actively able to separate the uncharged species from the plasma to reduce interferences, contamination and deposits on sensitive surfaces of the ion optics. The instrument should also be able to remove interferences with the same mass/charge ratio in the collision reaction cell. The instrument should function very well with pure gases (reducing the interference from undesired ions) as well as inert gases (for the removal of unknown spectral polyatomic interferences) at low gas loads in the collision reaction cell.

The instrument should have detection limits in the ppt-ppq concentration range, which is necessary for our research purposes, despite the high salt load from the background electrolyte in our application.

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

Value excluding VAT: 260 000,00 EUR

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

Duration in months: 3

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

In 2022 we published our intention to acquire a Inductively Coupled Plasma Mass Spectrometer by means of a negotiated procedure. Representations were received, so that procedure was stopped.

A previous publication (sent on September 15, 2023) was rejected by the European Union for spurious reasons. This is a repeat publication.

Section III: Legal, economic, financial and technical information

III.1. Conditions for participation

III.1.2. Economic and financial standing

Selection criteria as stated in the procurement documents

III.1.3. Technical and professional ability

Selection criteria as stated in the procurement 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

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: 27/11/2023 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

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

IV.2.7. Conditions for opening of tenders

Date: 27/11/2025 Local time: 12:01

Place:

Leiden, electronically

Section VI: Complementary information

VI.1. Information about recurrence

This is a recurrent procurement: no

VI.2. Information about electronic workflows

Electronic invoicing will be accepted

VI.3. Additional information

VI.4. Procedures for review

VI.4.1. Review body

Official name: Rechtbank Den Haag

Town: Den Haag

Country: Netherlands

VI.4.3. Review procedure

Precise information on deadline(s) for review procedures:

Within 20 days of contract-award decision.

VI.5. Date of dispatch of this notice

18/09/2023