

Finland-Jyväskylä: Laboratory, optical and precision equipments (excl. glasses)

OJ S 92/2020 12/05/2020

Contract notice

Supplies

Legal Basis:

Directive 2014/24/EU

Section I: Contracting authority

I.1. Name and addresses

Official name: University of Jyväskylä
National registration number: 0245894-7
Postal address: Seminaarinkatu 15
Town: Jyväskylä
NUTS code: FI193 Keski-Suomi
Postal code: 40014
Country: Finland
E-mail: kirjaamo@jyu.fi
Telephone: +358 142601211
Internet address(es):
Main address: <http://www.jyu.fi>

I.3. Communication

The procurement documents are available for unrestricted and full direct access, free of charge, at: <https://hanki.tarjouspalvelu.fi/hanki?id=297754&tpk=3a7c1f1a-2dc0-4179-997d-17c254478b37>
Additional information can be obtained from the abovementioned address
Tenders or requests to participate must be submitted electronically via: <https://hanki.tarjouspalvelu.fi/hanki?id=297754&tpk=3a7c1f1a-2dc0-4179-997d-17c254478b37>

I.4. Type of the contracting authority

Other type: University

I.5. Main activity

Education

Section II: Object

II.1. Scope of the procurement

II.1.1. Title

Inductively Coupled Plasma Reactive Ion Etch Tool/ICP-RIE System
Reference number: 217/02.03.00.00/2020

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

An inductively-coupled-plasma reactive-ion-etcher (ICP-RIE), capable of flexible etching of different materials. Whole system with all required components. Capable of handling wafers up to 200 mm in diameter. There must be a loadlock and (semi)automatic loading of single-wafers and small chips between loadlock and process chamber. The substrate electrode temperature should be controllable between at least -150 C and 300 C.

Contracting authority (JYU) may suspend the procurement procedure if the tenders exceed the budget available for the procurement.

Prior references of supplying comparable systems are required.

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: FI193 Keski-Suomi

Main site or place of performance: University of Jyväskylä, Nanoscience Center/Department of Physics.

II.2.4. Description of the procurement

An inductively-coupled-plasma reactive-ion-etcher (ICP-RIE), capable of flexible etching of different materials. Whole system with all required components. Capable of handling wafers up to 200 mm in diameter. There must be a loadlock and (semi)automatic loading of single-wafers and small chips between loadlock and process chamber. The substrate electrode temperature should be controllable between at least -150 C and 300 C.

The main focus of the machine is in etching thin layers (less than 300 nm) of silicon on top of silicon dioxide with high selectivity to silicon dioxide, high anisotropy, smooth sidewalls and no notching. In addition, the machine needs to be able to run the Bosch process when needed.

Anisotropic etching of silicon nitride will also be required. Specifically, process specifications must be given for the following processes:

- (i) anisotropic etching of silicon photonic crystal structures on SOI: device layer 200-300 nm, PMMA mask, feature sizes down to 20 nm, sidewall verticality and smoothness critical.
- (ii) anisotropic etching of 50 nm silicon layers with high (>20:1) selectivity to silicon dioxide. Sidewall verticality and notching control critical.
- (iii) anisotropic silicon nitride etching.
- (iv) Machine needs also to be capable of deep, anisotropic, through the wafer etching of silicon. We expect that to achieve these we need to be able to do at least following processes:
 - cryogenic etching of silicon with SF6 and O2,
 - bosch etching of silicon for deep structures (SF6, C4F8), and
 - ‘pseudo-bosch’ etching of silicon with the same process gases as Bosch but without the timed pulsing of gases.

In addition, the tenderer should quote any gas lines they deem necessary for the above mentioned processes, incl. silicon nitride etching. Gas lines for HBr etching of silicon and chlorine based etching of aluminium nitride (AlN) should also be quoted.

Contracting authority (JYU) may suspend the procurement procedure if the tenders exceed the budget available for the procurement.

Prior references of supplying comparable systems are required.

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

Start: 01/08/2020

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: yes

Description of options:

Service and support

Possibility for future upgrades and expansions:

Option for laser interferometric end point detection.

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:

According to tender documents.

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

III.2. Conditions related to the contract

III.2.2. Contract performance conditions

Contracting authority (JYU) may suspend the procurement procedure if the tenders exceed the budget available for the procurement.

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: 18/06/2020 Local time: 16:00

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: 6 (from the date stated for receipt of tender)

IV.2.7. Conditions for opening of tenders

Date: 19/06/2020 Local time: 10:00

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

This notice has links and/or attachments listed in <https://www.hankintailmoitukset.fi/en/public/procurement/35862/notice/46176>

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: markkinaoikeus@oikeus.fi

Telephone: +358 295643300

Internet address: <http://www.oikeus.fi/markkinaoikeus>

VI.5. Date of dispatch of this notice

11/05/2020