Tender

SEM Picomechanical Indenter (NU-Pico)

University of Northumbria at Newcastle

F02: Contract notice
Notice identifier: 2024/S 000-040692
Procurement identifier (OCID): ocds-h6vhtk-04c8f3
Published 17 December 2024, 7:05pm

Section I: Contracting authority

I.1) Name and addresses

University of Northumbria at Newcastle

College street, Newcastle upon Tyne

Newcastle upon Tyne

NE1 8ST

Contact

Laura Rizaeva

Email

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Telephone

+44 1912326002

Country

United Kingdom

Region code

UKC - North East (England)

Internet address(es)

Main address

www.northumbria.ac.uk

I.3) Communication

The procurement documents are available for unrestricted and full direct access, free of charge, at

https://www.delta-esourcing.com/respond/4HH2792572

Additional information can be obtained from the above-mentioned address

Tenders or requests to participate must be submitted to the above-mentioned address

I.4) Type of the contracting authority

Other type

University of Northumbria at Newcastle

I.5) Main activity

Education

Section II: Object

II.1) Scope of the procurement

II.1.1) Title

SEM Picomechanical Indenter (NU-Pico)

Reference number

T24/0044

II.1.2) Main CPV code

- 38511100 - Scanning electron microscopes

II.1.3) Type of contract

Supplies

II.1.4) Short description

The tender is for supply of Nanoindenter or picoindenter to fit inside our Scanning Electron Microscope (SEM model: Tescan Mira 3 with GM chamber). This will allow users to map surface mechanical and tribological properties of materials and correlate them to structural, morphological and chemical properties.

The Northumbria University (NU) Scanning Electron Microscope Picomechanical Indenter (NU-Pico) will provide a state-of-the-art regional facility for high-speed simultaneous characterisation of the nanomechanical, morphological and chemical properties of thin film coatings, surfaces and nanomaterials. NU-Pico will be the first SEM nanoindenter in the northeast of England and will support unprecedented recent growth in biomaterials, renewable energy materials, civil engineering materials and smart materials and surfaces research at NU and provide a game-changing nanomechanical facility for the region and beyond.

NU-Pico must enable a drastic expansion on our current nano-tribomechanical testing capability and unlock a range of complimentary material characterisation techniques, critical for rapid prototyping of novel materials for cutting edge applications. The modular and user-friendly nature of NU-Pico, together with its enhanced capability, must make it useful for a much larger user base, including early career researchers, PhD students, research technical professionals and industry users, from wider interdisciplinary research areas.

II.1.5) Estimated total value

Value excluding VAT: £290,000

II.1.6) Information about lots

This contract is divided into lots: No

II.2) Description

II.2.3) Place of performance

NUTS codes

- UKC - North East (England)

Main site or place of performance

NORTH EAST (ENGLAND)

II.2.4) Description of the procurement

NU-Pico must be developed with user engagement, ease of service, seamless integration and sustainability in mind, to provide an enabling platform for academic and industrial researchers to perform high speed mechanical property mapping of material surfaces (surface hardness, Young’s modulus, compression, tension, fatigue, adhesion etc.), while using SEM capabilities to perform simultaneous high resolution surface imaging, chemical mapping, 3D surface profiling and phase distribution studies. NU-Pico must also operate as a stand-alone Nanoindenter capable of high-speed mechanical property mapping for users not requiring the additional SEM capabilities. Moreover, NU-Pico must be capable of transforming into a powerful bio-indenter capable of studying the surfaces of soft and biological matter like biomaterials, biopolymers, functional biocomposites and hydrogels.

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: £290,000

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

Duration in months

24

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

To respond to this opportunity please click here: https://www.delta-esourcing.com/respond/4HH2792572

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: No

IV.2) Administrative information

IV.2.2) Time limit for receipt of tenders or requests to participate

Date

21 January 2025

Local time

5:00pm

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

21 January 2025

Local time

5:00pm

Section VI. Complementary information

VI.1) Information about recurrence

This is a recurrent procurement: No

VI.3) Additional information

For more information about this opportunity, please visit the Delta eSourcing portal at:

https://www.delta-esourcing.com/tenders/UK-UK-Newcastle-upon-Tyne:-Scanning-electron-microscopes./4HH2792572

To respond to this opportunity, please click here:

https://www.delta-esourcing.com/respond/4HH2792572

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VI.4) Procedures for review

VI.4.1) Review body

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Country

United Kingdom