Contract

Tender for The Supply of Optically Pumped Magnetometers and Accessories for Magnetoencephalography to the University of Birmingham

THE UNIVERSITY OF BIRMINGHAM

F03: Contract award notice
Notice identifier: 2022/S 000-019068
Procurement identifier (OCID): ocds-h6vhtk-033706
Published 12 July 2022, 3:37pm

Section I: Contracting authority

I.1) Name and addresses

THE UNIVERSITY OF BIRMINGHAM

Chancellors Close

BIRMINGHAM

B152TT

Contact

Kseniya Samsonik

Email

k.samsonik@bham.ac.uk

Country

United Kingdom

NUTS code

UKG31 - Birmingham

Internet address(es)

Main address

www.birmingham.ac.uk/index.aspx

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

Tender for The Supply of Optically Pumped Magnetometers and Accessories for Magnetoencephalography to the University of Birmingham

Reference number

SC10696/22

II.1.2) Main CPV code

- 35125110 - Biometric sensors

II.1.3) Type of contract

Supplies

II.1.4) Short description

The University of Birmingham invites tenders for supply of

- At least 65 optically pumped magnetometer (OPM) sensors and associated electronics to be used for magnetoencephalography (MEG)

- An adjustable helmet or a set of helmets to arrange the sensors around the head of adults and children

- A MEG-compatible chair for patient and helmet(s) support

These items will be part of facilities for brain imaging at the Centre for Human Brain Health. The items will be combined in order to detect neuronal dynamics as well as localize neuronal signals in the brain.

II.1.6) Information about lots

This contract is divided into lots: No

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

Value excluding VAT: £405,000

II.2) Description

II.2.2) Additional CPV code(s)

- 35125100 - Sensors

- 45223820 - Prefabricated units and components

II.2.3) Place of performance

NUTS codes

- UKG31 - Birmingham

II.2.4) Description of the procurement

The University of Birmingham invites tenders for supply of

- At least 65 optically pumped magnetometer (OPM) sensors and associated electronics to be used for magnetoencephalography (MEG)

- An adjustable helmet or a set of helmets to arrange the sensors around the head of adults and children

- A MEG-compatible chair for patient and helmet(s) support

These items will be part of facilities for brain imaging at the Centre for Human Brain Health. The items will be combined in order to detect neuronal dynamics as well as localize neuronal signals in the brain.

Details specified below:

We require the OPM sensors to have sensitivity below 15 fT/sqrt(Hz). The sensors will be used in the newly developed OPM lab at CHBH. The lab is in the proximity of elevators. Therefore, we require that the sensors have operating range of at least ± 100nT and the dynamic range of at least ± 10nT with good linear response in that range. Regarding the bandwidth, we require that the system can record oscillatory brain activity (3-100Hz); ideally 1-100 Hz.

The helmet(s) accommodating the OPM sensors should allow sensors placement within millimetres form the subject's scalp. Participants for OPM-MEG research will be of all ages. Therefore, it will be required that the sensor array can be adjusted easily between different head sizes. The helmet(s) should allow the array of sensors to conform rapidly to the subject's head. We require that the helmet(s) is able to accommodate at least 60 sensors.

To obtain precise source localisation, we require that the sensors in the array have well defined placement and the position of each sensor can be established with 1mm precision. We require that the information on each sensor's placement can be automatically stored in the data output file for each measurement.

The system should also include a chair or a bed that has supports to fix the helmet in a desired position. The chair should be able to sit adults as well as children. The chair should be compatible with ultralow magnetic field environment requirements, be sturdy and comfortable.

We require all the items to be safe to operate on human subjects. The recording sessions are expected to last 1-2h, during which wearing the helmet should be comfortable for the subject. We require that sensors to not overheat during this time.

We request the electronics of the sensors to be fully integrated, simple, ready to use and easy to scale up. It should allow us to drive the sensor, retrieve data and interface the sensors with computers. The Data Acquisition unit/OPM controllers should have additional

analogue and digital inputs and outputs. Additional head-position indicator (HPI) coils with a driver will be a benefit. Additional benefit will be if the format of the output files (raw and meta data) is compatible with conventional MEG devices and ability to import the files directly into MNE Python based software.

All main correspondence should go via the University's In-Tend website. Your tender documents and information must be submitted via In-Tend by the date and time specified; www.in-tendhost.com/universityofbirmingham.

II.2.5) Award criteria

Quality criterion - Name: Compliance to the Specifications / Weighting: 70

Quality criterion - Name: After Sales and Technical Backup / Weighting: 5

Quality criterion - Name: Delivery and Training / Weighting: 5

Quality criterion - Name: Sustainability and Environmental / Weighting: 5

Quality criterion - Name: Standard Supplier Questionnaire (SQ) / Weighting: 10

Price - Weighting: 5

II.2.11) Information about options

Options: No

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: 2022/S 000-012392

Section V. Award of contract

A contract/lot is awarded: Yes

V.2) Award of contract

V.2.1) Date of conclusion of the contract

13 June 2022

V.2.2) Information about tenders

Number of tenders received: 2

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

V.2.3) Name and address of the contractor

FieldLine Inc

Boulder, CO

Country

United States

NUTS code

- US - United States

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: £405,000

Total value of the contract/lot: £405,000

Section VI. Complementary information

VI.4) Procedures for review

VI.4.1) Review body

University of Birmingham

Birmingham

B15 2TT

Country

United Kingdom