Statement of Work / Performance Work Statement

Title: Purchase of Nicolet Summit X Fourier Transform Infrared (FTIR) Spectrometer

Model number 912A1139

Period of performance of this contract is: from time of award to September 30, 2026
Base Period: From time of award to Sept 30, 2026

SECTION 1 – BACKGROUND

The National Institute for Occupational Safety and Health Mining Program conducts research to develop and implement monitoring methods for respirable crystalline silica exposure in mining environments. A key component of this work is the Rapid Quartz Analysis (RQA) approach, which uses portable Fourier Transform Infrared spectroscopy to measure crystalline silica in respirable dust samples and support mine operators in protecting worker health.

Thermo Fisher Scientific is one of the four major manufacturers of portable Fourier Transform Infrared spectrometers. The program currently utilizes Thermo Fisher Scientific spectrometers; however, these instruments are older models that are approaching manufacturer end-of-life and are no longer fully supported for service. In addition, stakeholders implementing the RQA approach who purchase from Thermo will be purchasing the new instrument models since the older models have been discontinued. Additionally, the existing National Institute for Occupational Safety and Health-developed data processing tools are not compatible with updated software platforms. Acquisition of the Nicolet Summit X FTIR spectrometer is required to maintain compatibility with current instrumentation, ensure continuity of research capabilities, and support stakeholder needs.

SECTION 2 – PURPOSE/OBJECTIVE

The purpose of this acquisition is to procure a Nicolet Summit X Fourier Transform Infrared spectrometer and associated components to support ongoing research and stakeholder implementation of the Rapid Quartz Analysis monitoring approach.

The objective is to provide the National Institute for Occupational Safety and Health with current-generation instrumentation that is compatible with modern software platforms, supports development and validation of analytical methods, and enables continued support of mine operators and stakeholders implementing respirable crystalline silica monitoring technologies.

SECTION 3 – SCOPE OF WORK

The contractor shall provide one Nicolet Summit X Fourier Transform Infrared spectrometer, including all required hardware, software, and accessories necessary for operation. The contractor shall ensure that the system is fully functional, compatible with current operating systems and software, and suitable for analysis of respirable dust samples in support of the Rapid Quartz Analysis method.

The scope of work includes delivery of the instrument, installation (if required), and provision of all standard documentation, licenses, and warranties. The contractor shall ensure that the equipment meets manufacturer specifications and is delivered in new condition.

The scope is limited to the provision of the instrument and associated components and does not include ongoing analytical services beyond installation and initial support.

SECTION 4 – TASKS TO BE PERFORMED

Task 1: Equipment Provision and Delivery

1. The contractor shall provide
    a. NICOLET SUMMIT X FTIR SPECTROMETER
        i. LightDrive Optical Engine technology
        ii. Single-point source with non-migrating hotspot (10-year warranty)
        iii. Interferometer with KBr/Ge coated beamsplitter and dynamic alignment,

iv. 7800-350 cm-1 (10-year warranty)
v. Solid-state, temperature controlled diode laser (10-year warranty)
vi. High-Performance - Deuterated Triglycine Sulfate (DTGS) detector
vii. Integrated LightBar for visual feedback on pass/fail results
viii. Desiccated optical compartment sealed in a Al alloy chassis
ix. Integrated heat and humidity electronic sensors to protect the
x. bench from potential damage due to extreme environments
xi. Auto-align energy optimization
xii. Factory verified specifications, including:
xiii. 1 minute signal to noise of better than 35,000:1
xiv. 0.6 cm-1 standard resolution
xv. System Performance Verification (SPV) kit to automatically monitor system status including:
    1. ~ Hardware Diagnostics
    2. ~ Performance Verification based on ASTM E1421
    3. ~ Internal 1.5 MIL (38 micron) NIST traceable polystyrene (supplied with certificate)

2. OMNIC Paradigm Desktop Software includes these standard features:
    a. Dashboard/Home screen for quick access of recent work
    b. Visual, drag and drop workflow creator with example templates
    c. Live displays of data collection and spectral data preview
    d. Connectivity to OMNIC Anywhere cloud-based application
    e. Smart Background features cuts analysis time by 50%
    f. ATR Crystal Clean Detection provides visual indication of crystal cleanliness
    g. Advanced instrument health information tracking (optional)
    h. Software updates available for download online
    i. Flexible, one-click library creation
    j. Pre-defined reporting templates exportable to Microsoft Office Suite
    k. Multi-component search functionality
    l. Includes Pharmacopeia workflows (Ph. Eur., USP, JP, CP)
    m. Full spectral processing and analysis tools (baseline correction, spectral math, peak area, peak height, etc…)
    n. Qcheck correlation for QA/QC data analysis
    o. TQ EZ for quantification method development and prediction (Measure Only, Similarity Match, Beer`s Law, and CLS)
    p. Automated workflow creator based on user behavior
    q. Includes over 5,000 library spectra of a variety of materials
    r. Free upgrades included for the first 12-months
    s. Includes one copy of Paradigm workstation software
    t. OMNIC Paradigm Touchscreen Software includes these standard features:
    u. Multi-point, ultra-responsive software interface
    v. Simplified visual layout for streamlined application analysis
    w. Push-button simplicity to run dedicated workflows and analyses
    x. Spectral viewer with basic processing tools (i.e. peak area)
3. iD1 Transmission Accessory for the Nicolet Summit
    a. Holds a wide variety of transmission accessories
    b. Fits gas cells and cuvettes up to 10 cm
4. Nicolet Summit Hard-Sided Shipping Case

Task 2: Installation and Setup

1. The contractor shall install the instrument at the Government facility.
2. The contractor shall ensure the instrument is fully operational upon installation.
3. The contractor shall verify proper system performance in accordance with manufacturer specifications.

Task 3: Documentation and Warranty

1. The contractor shall provide all user manuals, software documentation, and technical specifications.
2. The contractor shall provide applicable software licenses.
3. The contractor shall provide manufacturer warranty information and support details

SECTION 5 – GOVERNMENT FURNISHED PROPERTY

No Government Furnished Property will be provided under this contract.

SECTION 6 – PLACE OF PERFORMANCE AND CONTRACT SUPPORT HOURS

SUBSECTION A – PLACE OF PERFORMANCE

Work under this contract shall be performed at the Government facility located at the CDC-NIOSH facility, 626 Cochrans Mill Rd, Pittsburgh PA 15236 USA, where the equipment will be delivered and installed.

SUBSECTION B – CONTRACT SUPPORT HOURS

The contractor shall perform delivery and installation activities during normal business hours, defined as Monday through Friday, 8:00 a.m. to 5:00 p.m., excluding Federal holidays, unless otherwise coordinated with the Contracting Officer's Representative

SUBSECTION C- Observance of Legal Holidays and Administrative Leave

Holidays-Government personnel observe the following listed days as holidays:

Washington's Birthday

Memorial Day

Juneteenth

Independence Day

Labor Day

Veteran's Day

Thanksgiving

Christmas Day

New Year's Day

Columbus Day

Martin Luther King Day

Any other day designated by Federal Statue

Any other day designated by Executive Order

Any other day designated by Presidential proclamation

SECTION 7 – TRAVEL

Travel will be in accordance with / and not to exceed the Federal Travel Regulation rates. Travel costs need to be approved in advance by the COR. The contractor shall be required to provide their travel policy to the Government for review.

Travel does [not] include conferences. Conference Approval Management Systems (CAMS) approval is required in advance of any travel for conferences. If the need for conference travel occurs, the contract will be modified to separately add funding.

Travel is not included in the scope of this contract.

SECTION 8 – DELIVERABLES/REPORTING SCHEDULE

Task	Deliverable	Quantity/Format	Due Date	Deliver To
Task 1	FTIR Instrument and Components	Physical delivery	Within 60 calendar days of award	Project POC, COR
Task 2	Installed and Operational System	Completed installation	Within 10 business days of delivery	Project POC, COR
Task 3	Documentation and Software	Electronic and hard copy	At time of delivery	Project POC, COR
Task 3	Warranty Documentation	Electronic	At time of delivery	Project POC, COR

Acceptance Criteria: Equipment shall be accepted upon verification that it meets manufacturer specifications and is fully operational.

SECTION 9 – REFERENCE MATERIALS

Manufacturer specifications and technical documentation for the Nicolet Summit X FTIR spectrometer shall be used as the primary reference for performance and acceptance.

SECTION 10 – MINIMUM VENDOR QUALIFICATIONS

The contractor shall be an authorized manufacturer or distributor of the Nicolet Summit X Fourier Transform Infrared spectrometer. The contractor shall be capable of providing manufacturer-certified equipment, installation (if applicable), and warranty support.

SECTION 11 – ADDITIONAL REQUIREMENTS

Information Security and Privacy
See attached Information Security Checklist.

Section 508 Compliance

Part A – Provision

Reference HHSAR 352.239-73[8] Electronic Information and [Communication] Technology Accessibility Notice.

(Deviation)

(a) Any offeror responding to this solicitation must comply with established HHS Information and Communication Technology (ICT) accessibility standards. Information about Section 508 is available at https://www.hhs.gov/web/section-508/index.html.

(b) The Section 508 accessibility standards applicable to this solicitation are stated in the clause at 352.239-79 Information and Communication Technology Accessibility. In order to facilitate the Government's determination whether proposed ICT supplies, products, platforms, information, and documentation meet applicable Section 508 accessibility standards, offerors must submit an appropriate HHS Section 508 Accessibility Conformance Checklist (see https://www.hhs.gov/web/section-508/accessibility-checklists/index.html) or an Accessibility Conformance Report (ACR) (based on the Voluntary Product Accessibility Template (VPAT) see https://www.itic.org/policy/accessibility/vpat), in accordance with the completion instructions. The purpose of the checklists and conformance reports are to assist HHS acquisition and program officials in determining whether proposed ICT supplies, products, platforms, information, and documentation conform to applicable Section 508 accessibility standards. Checklists and ACRs evaluate—in detail—whether the ICT conforms to specific Section 508 accessibility standards and identifies remediation efforts needed to address conformance issues.

(c) If an offeror claims its supplies or services meet applicable Section 508 accessibility standards, and it is later determined by the Government, i.e., after award of a contract or order, that supplies, products, platforms, information, documentation, or services support delivered do not conform to the described accessibility standards, remediation of the supplies, products, platforms, information, documentation, or services support to the level of conformance specified in the contract will be the responsibility of the Contractor at its expense.

(d) In order to facilitate the Government's determination whether proposed ICT supplies meet applicable Section 508 accessibility standards, offerors must submit an Accessibility Conformance Report, in accordance with its completion instructions and tailored to the requirements in the solicitation. The purpose of the Report is to assist HHS acquisition and program officials in determining whether proposed ICT supplies conform to applicable Section 508 accessibility standards. The template allows offerors or developers to self-evaluate their supplies and document, in detail, whether they conform to a specific Section 508 accessibility standard, and any underway remediation efforts addressing conformance issues. Instructions for preparing the Template are available at https://www.section508.gov/.

(e) Additionally, offerors must provide enough information to assist the Government in determining that the ICT services conform to Section 508 accessibility standards, including any underway remediation efforts addressing conformance issues.

(f) Respondents to this solicitation must identify any inability to conform to Section 508 requirements. If an offeror claims its supplies or services meet applicable Section 508 accessibility standards, and it is later determined by the Government, i.e., after award of a contract or order, that supplies or services delivered do not conform to the described accessibility standards, remediation of the supplies or services to the level of conformance specified in the contract will be the responsibility of the Contractor at its expense.

(g) Items delivered as electronic content must be accessible to HHS acceptance criteria. Checklist for various formats are available at http://508.hhs.gov/. Materials, other than items incidental to contract management, that are final items for delivery should be accompanied by the appropriate checklist, except upon approval of the Contracting Officer or Contracting Officer's Representative.

Part B - Clause

HHSAR 352.239-74[9] Electronic, Information, and Communication Technology Accessibility.

(Deviation)

(a) Pursuant to Section 508 of the Rehabilitation Act of 1973 (29 U.S.C. 794d), as amended by the Workforce Investment Act of 1998, all information and communication technology (ICT) supplies, products, platforms, information, documentation, and services, or support developed, acquired, maintained or delivered under this contract or order must comply with the Revised 508 Standards, which are located at 36 C.F.R. 1194.1 and Appendices A, B, and C, and are available at https://www.access-board.gov/ict/. Information about Section 508 is available at https://www.hhs.gov/web/section-508/index.html.

(b) Additional Section 508 accessibility standards applicable to this contract or order are identified as follows:

205 WCAG 2.0 Level A & AA Success Criteria
302 Functional Performance Criteria
502 Inoperability with Assistive Technology
503 Applications
504 Authoring Tools
602 Support Documentation
603 Support Services

If it is determined by the Government that ICT supplies, products, platforms, information, documentation, and services support provided by the Contractor do not conform to the described accessibility standards in the contract, remediation of the supplies, products, platforms, information, documentation, or services support to the level of conformance specified in the contract will be the responsibility of the Contractor at its own expense.

(c) In the event of a modification(s) to this contract or order, which adds new ICT supplies or services or revises the type of, or specifications for, supplies, products, platforms, information, documentation, or services support, the Contracting Officer shall require that the Contractor submit a completed HHS Section 508 Accessibility Conformance Checklist (see https://www.hhs.gov/web/section-508/accessibility-checklists/index.html) or an Accessibility Conformance Report (ACR) (based on the Voluntary Product Accessibility Template (VPAT) see https://www.itic.org/policy/accessibility/vpat), and any other additional information necessary to assist the Government in determining that the ICT supplies or services conform to Section 508 accessibility standards. If it is determined by the Government that ICT supplies, products, platforms, information, documentation, and services support provided by the Contractor do not conform to the described accessibility standards in the contract, remediation of the supplies, products, platforms, information, documentation, or services support to the level of conformance specified in the contract will be the responsibility of the Contractor at its own expense.

(d) If this is an Indefinite-Delivery type contract, a Blanket Purchase Agreement or a Basic Ordering Agreement, the task/delivery order requests that include ICT supplies, products, platforms, information, documentation, or services support will define the specifications and accessibility standards for the order. In those cases, the Contractor shall be required to provide a completed HHS Section 508 Accessibility Conformance Checklist (see https://www.hhs.gov/web/section-508/accessibility-checklists/index.html) or an ACR (based on the VPAT see https://www.itic.org/policy/accessibility/vpat), and any other additional information necessary to assist the Government in determining that the ICT supplies, products, platforms, information, documentation, or services support conform to Section 508 accessibility standards. If it is determined by the Government that ICT supplies and services provided by the Contractor do not conform to the described accessibility standards in the provided documentation, remediation of the supplies, products, platforms, information, documentation, or services support to the level of conformance specified in the contract will be the responsibility of the Contractor at its own expense.

(e) The contractor shall identify to the Contracting Officer any perceived exception or exemption to Section 508 requirements for review by the agency Section 508 Program.

OTHER CONSIDERATIONS AND ADDITIONAL INFORMATION FOR OFFICE OF ACQUISITION SERVICES

SECTION 1 – PROPOSED CONTRACT TYPE

Firm-Fixed-Price (FFP)**.**

Requirement is being submitted as a sole source, sole source contractor is Thermo Electron North America LLC, Contractor POC: Lauren Ostopowicz, (717) 434-8958, lauren.ostopowicz@thermofisher.com

SECTION 2 – OPTIONAL SPECIAL CONSIDERATIONS

SUBSECTION A – PAYMENT CLAUSES

Payment under this contract shall be made on a firm-fixed-price basis for the purchase, delivery, and installation (if applicable) of the Nicolet Summit X Fourier Transform Infrared spectrometer and associated components.

The contractor shall submit an invoice after delivery and Government acceptance of the equipment. Acceptance shall be determined by the Contracting Officer's Representative based on verification that the equipment is delivered, installed (if applicable), and fully operational in accordance with manufacturer specifications and contract requirements.

Invoices shall include, at a minimum, the contract number, description of equipment provided, total amount due, and date of delivery. Payment shall be made in accordance with the Prompt Payment Act and applicable Federal regulations.

Partial payments and advance payments are not authorized under this contract.

SUBSECTION B – DATA RIGHTS CLAUSES
This acquisition is for a commercial off-the-shelf instrument. Data rights shall be governed by Federal Acquisition Regulation 52.227-14, Rights in Data – General, as applicable.

All documentation provided with the instrument, including user manuals, software documentation, and technical specifications, shall be delivered with rights sufficient for the Government to install, operate, maintain, and use the equipment for Government purposes.

Proprietary software and documentation provided by the manufacturer shall remain subject to standard commercial license terms. The Government shall receive appropriate licenses to use the software necessary to operate the instrument but shall not acquire ownership of proprietary software or vendor-developed intellectual property.

No Government-generated data rights are anticipated under this contract.

SECTION 3 – EVALUATION FACTORS

This requirement is being pursued as a sole source acquisition. Evaluation factors are not applicable.

SUBSECTION A – TECHNICAL
N/A

SUBSECTION B – PROCUREMENT POINT OF CONTACT (POC) INFORMATION
COR/POC: Teresa Barone / Rachel L. T. Walker
Telephone Number: Teresa: 412.386.6768 / Rachel L. T. Walker: 412.386.6107
E-mail Address: Teresa: wqu2@cdc.gov / Rachel L. T. Walker: oul1@cdc.gov
Preferred method of communication: email