1. Order submission to:
   Office of Reference Materials
   National Institute of Standards and Technology
   100 Bureau Drive
   Stop 2300
   Gaithersburg, MD 20899-2300

2. Customer:

Use continuation sheet if needed.

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<th>Item #</th>
<th>Description of item(s)</th>
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Please sign both the SRI and Calibration Pro Forma Invoices and return to Office of Reference Materials
National Institute of Standards and Technology, 100 Bureau Drive, Stop 2300, Gaithersburg, MD 20899-2300
1. Order submission to:
   Office of Reference Materials
   National Institute of Standards and Technology
   100 Bureau Drive
   Stop 2300
   Gaithersburg, MD 20899-2300

2. Customer:

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</table>

**Total**

IN WITNESS WHEREOF: The Parties have caused the agreement as defined in the Standard Reference Instruments (SRI) TERMS and CONDITIONS to be executed by their duly authorized representatives as follows:

**NIST Contact**

Steven Choquette
100 Bureau Drive Stop 2300
Gaithersburg, MD 20899-2300
Phone: 301-975-2200
Fax: (301) 948-3730
E-mail: srminfo@nist.gov

**Customer Contact**

**Prepaid Shipping Account #:**

**Total**

$
STANDARD REFERENCE INSTRUMENTS TERMS and CONDITIONS

Authority – The National Institute of Standards and Technology (NIST) provides Standard Reference Instruments (SRI) as stated in 15 U.S.C. 272(b)(2), which authorizes NIST to develop, maintain, and retain custody of national standards of measurement, and provide the means and methods for making measurement consistent with those standards; 15 U.S.C. 272(c)(6), which authorizes NIST to prepare, certify, and sell standard reference materials for use in ensuring the accuracy of chemical analyses and measurements of physical and other properties of materials; and 15 U.S.C. 272(c)(27), which authorizes NIST to undertake such other activities similar to those specified in 15 U.S.C. 272(c) as the Director determines appropriate.

Contracts and Signed Statements – As an agency of the United States Federal Government, Department of Commerce, the National Institute of Standards and Technology attests solely to the provisions described here. Receipt of orders by NIST does not imply acceptance of any provisions set forth in the order that are contrary to the policy, practice, or regulations of NIST or the U.S. Government. In general, NIST will not sign any affidavits, acknowledgment forms, or other documents that may be required by any domestic or foreign entity for policy governing procurement of goods and services. These terms and conditions supersede any conflicting and/or additional terms and conditions included in any purchase request or other document submitted to request NIST Standard Reference Instruments. In ordering NIST Standard References Instruments, the customer is agreeing to these Terms and Conditions which are also available at https://www.nist.gov/sri/terms-and-conditions.

Price – The price quote provided to Customer includes the fee for the SRI, the fee for associated Calibrations (see separate Calibrations Pro Forma Invoice), and the estimated cost for installation of the SRI and any associated travel and training. Customer must reimburse NIST for all actual costs incurred for installation, travel and training. All work will be performed by NIST employees.

Duration of Agreement – This agreement becomes effective when signed by the parties. The agreement will terminate one year from the date of last signature.

Amendments or Changes to Existing Orders – Any changes to an accepted/signed Standard Reference Instrument Pro Forma Invoice is considered an amendment, and a new Standard Reference Instrument Pro Forma Invoice, outlining the requested change, is required. Some examples include:
- Changes to which SRI is ordered as outlined in the online Standard Reference Materials Catalog.
- Extension of the agreement past the termination date.
- Cost changes (increase or decrease) of greater than 10% from the estimated cost for installation, travel and training.

Shipping – Customer will arrange and pay for shipping directly with the shipping company when informed by NIST that the SRI is ready for shipment. Customers are responsible for all customs duties, import fees, and shipping insurance.

Invoices – NIST is a Federal government agency under the U.S. Department of Commerce; therefore, NIST has to follow the payment process directed by the U.S. Department of Treasury. NIST DOES NOT electronically submit invoices. Invoices are mailed to the provided billing postal address. Should you need an email copy of your invoice, please send your request to sminfo@nist.gov.

Payment Information – All billing terms are net 30 days for domestic customers, and net 45 days for international customers from the date of the invoice. First time international customers must prepay. Other requirements for prepayment are at the discretion of NIST. Payment must be received by the due date to avoid the assessment of late fees. No discounts are offered for early payment. We cannot accept a Letter of Credit as a form of payment. If you need any additional information, please contact the NIST Finance Division by phone on 301/975-3880, by e-mail at billing@nist.gov, or by fax on 301/975-8943. NIST accepts the following forms of payment:

- **Credit Card and ACH:** Go to [www.pay.gov](http://www.pay.gov). Type "NIST" into the search box to search for the NIST payment forms. Select "NIST Standard Reference Materials Payment Form." Complete all required fields and submit your payment. Note: Please verify with your banking institution that your account is set up to process ACH payments if you select this method of payment.

- **Wire Transfer:** NIST can only accept wires using the U.S. Department of Treasury FEDWIRE system. NIST does not use the SWIFT system and does not have a SWIFT code. The transfer of funds must either process through a U.S. correspondent bank, or by having your country's central bank send a swift telecommunication system message to the Federal Reserve Bank. **Be sure to include any processing fees your bank may charge.**
  
  o The account number and name are of critical importance and must be referenced in order for NIST to be properly credited with the payment. It must appear in the precise manner shown above to allow for the automated processing and classification of the funds transfer message. In addition, please refer to the NIST invoice/receivable number, your purchase order number, your sales order number, your country, and any other pertinent information that would help us to identify your payment.
  
  o The transfer of funds must either process through a U.S. correspondent bank, or through your country's central bank via a swift telecommunication system message to the Federal Reserve Bank. **Be sure to cover any processing fees your bank may charge you.**

- **By Check:** The NIST Lockbox accepts check payments on behalf of NIST. All checks must be drawn on a United States bank AND made payable in U.S. dollars. The NIST invoice/receivable number must be referenced on the check stub. Send payment to: NIST, P.O. Box 301505, Los Angeles, CA 90030-1505. For checks drawn on non-US banks, please remit your check to NIST Receivables Group, 100 Bureau Drive, MS-1624, Gaithersburg, MD 20899-1624.

- **EFT is not a payment option of NIST.** Please do not use the wire information above as to attempt to pay NIST as EFT. Please use the ACH option with PAY.GOV.

Repairs – Repairs or other follow-on work on SRIs may only be performed by NIST under a separate reimbursable agreement for services.
Use of Name or Endorsements – Neither Party shall use the name of the other Party on any advertisement, product or service which is directly or indirectly related to the SRI. By purchasing the SRI, the Parties do not directly or indirectly endorse any product or service provided, or to be provided, by the other Party, its successors, assignees, or licensees. Customer shall not in any way imply that sale or use of this SRI is an endorsement of any product or service.

Liability – NIST SHALL NOT BE LIABLE AND CUSTOMER HEREBY RELEASES NIST FROM LIABILITY FOR ANY INDIRECT, CONSEQUENTIAL, SPECIAL, OR INCIDENTAL DAMAGES OR INJURY (INCLUDING DAMAGES FOR LOSS OF BUSINESS PROFITS, BUSINESS INTERRUPTION, LOSS OF BUSINESS INFORMATION, AND THE LIKE), WHETHER ARISING IN TORT, CONTRACT, OR OTHERWISE, ARISING FROM OR RELATING TO THE SRI, EVEN IF NIST HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. NIST’s liabilities are subject to the Federal Tort Claims Act, 28 U.S.C. Section 2671 et seq., the Federal Employees Compensation Act, 5 U.S.C. Section 8101 et seq., the Contracts Disputes Act, 41 U.S.C. Section 7101 et seq., and other legal authorities. Customer agrees to indemnify and hold harmless the United States Government for any and all damages or liabilities that arise out of any use of the SRI by Customer, Customer’s agents and Customer’s employees.

NO WARRANTY – THE PARTIES MAKE NO EXPRESS OR IMPLIED WARRANTY AS TO ANY MATTER WHATSOEVER, INCLUDING THE CONDITIONS OF THE SRI, OR THE OWNERSHIP, MERCHANTABILITY, NON-INFRINGEMENT OR FITNESS FOR A PARTICULAR PURPOSE OF THE SRI.

Force Majeure – NIST shall not be liable for any unforeseeable event beyond its reasonable control not caused by the fault or negligence of NIST, which causes NIST to be unable to perform its obligations under this agreement (and which it has been unable to overcome by the exercise of due diligence), including, but not limited to, flood, drought, earthquake, storm, fire, pestilence, lightning and other natural catastrophes, epidemic, war, riot, civic disturbance or disobedience, strikes, labor dispute, or failure, threat of failure, or sabotage of facility or equipment, or any order or injunction made by a court or public agency. In the event of the occurrence of such a force majeure event, NIST shall promptly notify the other Party. NIST shall further use its best efforts to resume performance as quickly as possible and shall suspend performance only for such period of time as is necessary as a result of the force majeure event.

Termination and Cancellation – Either party may terminate this agreement by providing 30 days’ written notice to the other party. If Customer terminates the agreement, NIST is authorized to collect costs incurred prior to cancellation of the agreement plus any termination costs.

Governing Law – The construction validity, performance and effect of this agreement for all purposes shall be governed by the laws of the United States.


Traceability – The NIST Policy on Traceability can be found at http://www.nist.gov/traceability
<table>
<thead>
<tr>
<th>Item #</th>
<th>Service ID/SP 250 #</th>
<th>Description of item(s) requiring calibration services (e.g., item, measurement parameters)</th>
<th>Model #</th>
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Use continuation sheet if needed.

 Fees for NIST services do not include shipping cost or insurance. Insure the shipments to and from NIST and clearly state the method of return shipment. Shipments to NIST must be at FOB destinations (Customer pays for shipping.) Return shipments are sent FOB origin (Customer pays for shipping.) Items requiring prepaid shipments must be included in Prepaid Shipping section below.

NIST Contact
James K. Olthoff
100 Bureau Drive Stop 8400
Gaithersburg, MD 20899-8400
Phone: 301-975-2220
Fax: 301-975-3038
E-mail: calibrations@nist.gov

Director, Physical Measurement Laboratory

Collaborator/Customer Contact
Authorizing Official/Date

Subtotal (Page 1), $

Subtotal (Cont Sheet), $

Total, $

Prepaid Shipping Information
Account #:
Method: FedEx
CALIBRATION SERVICE TERMS and CONDITIONS

1. Introduction - The National Institute of Standards and Technology provides calibration services. This Calibration Cooperative Research and Development Agreement (CRADA) is entered into by and between collaborator/customer and the National Institute of Standards and Technology (NIST), a government agency with an office at 100 Bureau Drive, Stop 8363, Gaithersburg, MD 20899-8363.

2. Authority - The parties enter into this Agreement pursuant to 15 USC 3710a and 15 USC 272b(6) and (c)(2), which give NIST the authority to enter into CRADAs in order to assist industry in the development of measurements, measurement methods, and basic measurement technology by testing or calibrating standards and standard measuring apparatus.

3. Calibration - The purpose of the CRADA is to perform the calibrations listed on this Pro Forma Invoice.

4. CRADA Protected Information - In accordance with 15 U.S.C. § 3710(a)(7)(B), NIST agrees not to disseminate "CRADA Protected Information" for a period of five (5) years after its development. "CRADA Protected Information" includes, but is not limited to, the types of calibrations performed, the cost of the performed calibrations, all data related to the measurements performed on the collaborator's equipment, and the official Report of Calibration or Test issued by NIST. NIST may provide appropriate protections against the dissemination of such information, including exemption from Subchapter II of Chapter 5 of Title 5, United States Code. These restrictions are consistent with and do not supersede, conflict with, or otherwise alter the employee obligations, rights, or liabilities created by Executive Order No. 13526, section 7211 of Title 5, United States Code (governing disclosures to Congress), section 1034 of title 10, United States Code, as amended by the Military Whistleblower Protection Act (governing disclosure to Congress by members of the military); section 2302(b)(8) of Title 5, United States Code, as amended by the Whistleblower Protection Act of 1982 (50 U.S.C. 421 et seq) (governing disclosures that could expose confidential Government agents); and the statutes which protect against disclosure that may compromise the national security, including sections 641, 793, 794, 798, and 952 of title 18, United States Code, and section 4(b) of the Salvors, Representatives, and Other Related Services Act of 1950 (50 U.S.C. 783(b)). The definitions, requirements, obligations, rights, sanctions, and liabilities created by said Executive Order and listed statutes are incorporated into this Agreement and are controlling. Nothing in this Agreement bars disclosures to Congress or to an authorized official of an executive agency or the Department of Justice that are essential to reporting a substantial violation of law.

5. Intellectual Property - The parties do not intend to create intellectual property (IP) while working under this Agreement. The Collaborator affirmatively declines licensing or other rights in IP developed by NIST under this Agreement.

6. Duration of Agreement - This agreement becomes effective when signed by the parties. The agreement will terminate upon the issuance of a Report of Calibration or Test by NIST and payment to NIST for calibration services by the Collaborator, whichever occurs later. Termination of the agreement does not affect the duration of the CRADA Protected Information defined herein.

7. Amendments or Changes to Existing Orders - Any changes to an accepted/signed Calibration Service Pro Forma Invoice will be treated as an amendment and a new Calibration Service Pro Forma Invoice outlining the requested changes is required. Some examples include but are not limited to the following:
   • Changes to the description of the instrument/device/artifact requiring calibration services.
   • Additional Service ID/SP 235 # calibration service requests.
   • Cost changes (increase or decrease) to the total amount on the approved/signed Calibration Service Pro Forma Invoice.

8. Termination and Cancellation Clause - Any party may terminate this agreement by providing 10 days written notice to the other party. If the Collaborator terminates the agreement, NIST is authorized to collect costs incurred prior to cancellation of the agreement plus any termination costs. If the instrument/device/artifact arrives at NIST in a damaged condition that precludes NIST from providing the calibration service requested, the approved/signed Calibration Service Pro Forma Invoice will be canceled. A new Calibration Service Pro Forma Invoice is required for any replacement instrument/device/artifact requested to be calibrated.

9. Resolution of Disagreements - Should disagreements arise on the interpretation of the provisions of this agreement or amendments and/or revisions thereto, that cannot be resolved at the operating level, the area(s) of disagreement shall be stated in writing by each party and presented to the other party for consideration. If agreement or interpretation is not reached within 30 days, the parties shall forward the written presentation of the disagreement to respective higher officials for appropriate resolution.

10. Limitation on Liability - The U.S. Government shall not be responsible for damage to any property of the Collaborator provided to NIST under this Agreement.

11. Use of NIST Instrumentation at a User’s Facility - The delivery of certain measurement services requires that NIST equipment be loaned to the customer for on-site measurements and/or calibrations. The Collaborator is responsible for the equipment once it leaves NIST until it is returned to NIST's possession. The Collaborator will obtain appropriate liability insurance, including property damage insurance, and will be required to present evidence of insurance coverage for the equipment in an amount not less than $100,000, or alternatively, not less than the amount specified by NIST in the documentation accompanying the equipment.

12. Invoicing information - Payment Terms: Domestic - Net 30 days; Canada, Mexico - Net 45 days; Other International – Prepay. Remittance information on Page 3

NIST Federal Identification Number: 53-0205706
NIST DUNS Number: 929956050

W-9 Mail to:
NIST
Accounts Receivable
Stop 1624
Gaithersburg, MD 20899-1624

Credit Card, ACH or Wire Transfer Customers: Go to www.pay.gov. Bypass the user id and password section; you do not need to be registered with pay.gov to make a payment against our account. To locate the payment forms click on "By Agency Name" on the left hand side of the menu bar. Find and select the National Institute of Standards and Technology. Choose the NIST Calibration Payment Form. Complete all required fields and submit your payment. Note: Please verify with your banking institution that your account is set up to have ACH payments processed. Please e-mail us at billing@nist.gov for wire transfer instructions.
13. References to NIST in Advertisements - The results of calibrations and tests performed by NIST are intended solely for the use of the organization requesting them, and apply only to a particular device or specimen at the time of its test. The results shall not be used to indicate or imply that they are applicable to other similar items. In addition, such results must not be used to indicate or imply that NIST approves, recommends, or endorses the manufacturer, the supplier, or the user of such devices or specimens, or that NIST in any way "guarantees" the later performance of items after calibration or test. Collaborator may state as a fact that calibrations provided by NIST under this agreement are used in part to establish metrological traceability to NIST.

NIST declares it to be in the national interest that NIST maintain an impartial position with respect to any commercial product. Advertising the findings on a single instrument/device/artifact could be misinterpreted as an indication of performance of other instruments/devices/artifacts of identical or similar type. There will be no objection, however, to a statement that the manufacturer's primary standards have been periodically calibrated by NIST, if this is actually the case, or that the customer might arrange to have NIST calibrate the item purchased from the manufacturer.

NIST does not approve, recommend, or endorse any product or proprietary material. No reference shall be made to NIST or to reports or results furnished by NIST in any advertising or sales promotion, which would indicate or imply that NIST approves, recommends, or endorses any product or proprietary material, or which has as its purpose an intent to cause directly or indirectly the advertised product to be used or purchased because of NIST test reports or results.

14. Contracts and Signed Statements - As an agency of the United States Federal Government, Department of Commerce, the National Institute of Standards and Technology attests solely to the provisions described above. Receipt of orders by NIST does not imply acceptance of any provisions set forth in the order that are contrary to the policy, practice, or regulations of NIST or the U.S. Government. In general, NIST will not sign any affidavits, acknowledgement forms, or other documents that may be required by any domestic or foreign entity for policy governing procurement of goods and services. The terms and conditions of this Pro Forma Invoice supersede any conflicting and/or additional terms and conditions included in any purchase request or other document submitted to request NIST calibration services.

15. Shipping, Insurance, and Risk of Loss - All shipping expenses are the responsibility of the Collaborator.

16. Shipping Procedures
- All shipping expenses are the responsibility of the Collaborator. The U.S. Government cannot pay for shipping insurance. Insurance for shipping to and from NIST is the responsibility of the Collaborator. Consult with NIST on shipping costs and billing.
- Ship only items in good repair. Apparatus in disrepair will not be calibrated. If defects are found after calibration has begun, the procedure will be terminated, a report issued, and a charge levied for work completed.
- Use strong, reusable packing materials and containers marked clearly and indelibly on the outside with the requester's name, address and the following notation: REUSABLE CONTAINER, DO NOT DESTROY.
- Follow any special shipping procedures, including license and preauthorization requirements given in the technical sections of the Calibration Services Users Guide, particularly those sections covering radiation and dosimetry measurements.
- Insure the shipments to and from NIST and clearly state the method of return shipment. NIST will not assume liability for loss or damage unless such loss and damage result solely from the negligence of NIST personnel. If return shipment by parcel post is requested or in suitable, NIST will prepay the return shipment but will not insure it. When no shipping or insurance instructions are furnished, NIST will return the shipment by common carrier, collect and uninsured.
- Shipments to NIST must be at FOB destinations (customer pays for shipping).
- Return shipments are sent FOB origin (customer pays for shipping) or are shipped by NIST and billed to customer by prior arrangement.

17. NIST Quality System
NIST has implemented a quality system for its measurement services. The NIST Quality System (NIST QS) comprises policies and procedures that are documented in the NIST Quality Manual (NIST QM-I). NIST commits that the NIST QS be, to the extent allowed by statute and regulation, in conformity with the international standard ISO/IEC 17025 and the relevant requirements of ISO Guide 34 as they apply to the Standard Reference Materials® (SRMs) and related services that NIST delivers. In general the scope of the NIST quality system for measurement services encompasses all services listed in the NIST Special Publication (SP) 250, NIST Calibration Services Users Guide and the NIST Special Publication (SP) 260, Standard Reference Materials Catalog. In particular, specific services covered by the NIST QS are those that are declared in conformity by the NIST Quality Manager. For further details, consult the NIST Quality Manual for Measurement Services (NIST QM-I), available for download at http://www.nist.gov/qualitysystem/.

18. Traceability
- The primary purpose of the NIST Policy on Traceability (http://www.nist.gov/traceability) is to state the NIST role with respect to traceability. The Policy presents the definition of measurement traceability used by NIST, and clarifies the roles of NIST and others in achieving traceability of measurement results for measurements both internal and external to NIST.
- The NIST Policy on Traceability also addresses the role of NIST in providing its customers with the tools they need (a) to assist them in establishing traceability of their measurement results, and (b) to assess the claims of traceability made by others. This is achieved directly through the provision of NIST measurement-related products and services, through collaboration with relevant organizations, through development and dissemination of technical information on traceability, and through conducting coordinated outreach programs.
- Merely having an instrument or artifact calibrated at NIST is not enough to make the measurement result traceable to reference standards developed and maintained by NIST. To establish traceability to such reference standards, there must be an unbroken chain of comparisons and each provided measurement must be accompanied by a statement of uncertainty (http://www.nist.gov/pml/pubs/nist295/index.cfm). The measurement system by which values are transferred must be clearly understood and under control. The dates and details of each link in the chain must also be provided.