

SOLICITATION/CONTRACT/ORDER FOR COMMERCIAL ITEMS <small>OFFEROR TO COMPLETE BLOCKS 12, 17, 23, 24, & 30</small>	1 REQUISITION NUMBER REQ-4500-17-0006	PAGE OF 1 8
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2. CONTRACT NO. CPSC-D-17-0001	3. AWARD/EFFECTIVE DATE 06/05/2017	4. ORDER NUMBER 0002	5. SOLICITATION NUMBER	6. SOLICITATION ISSUE DATE
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7. FOR SOLICITATION INFORMATION CALL:	a. NAME Greg Grayson	b. TELEPHONE NUMBER (No collect calls) 301-504-7725	8. OFFER DUE DATE/LOCAL TIME ET
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9. ISSUED BY CONSUMER PRODUCT SAFETY COMMISSION DIV OF PROCUREMENT SERVICES 4330 EAST WEST HWY ROOM 523 BETHESDA MD 20814	CODE FMPS	10. THIS ACQUISITION IS <input checked="" type="checkbox"/> UNRESTRICTED OR <input type="checkbox"/> SET ASIDE % FOR
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11. DELIVERY FOR FOB DESTINATION UNLESS BLOCK IS MARKED <input type="checkbox"/> SEE SCHEDULE	12. DISCOUNT TERMS Net 30	13a. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 700) <input type="checkbox"/>	13b. RATING
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15. DELIVER TO CONSUMER PRODUCT SAFETY COMMISSION DIRECTORATE FOR HEALTH SCIENCES 5 Research Place Rockville MD 20850	CODE HS	16. ADMINISTERED BY CONSUMER PRODUCT SAFETY COMMISSION DIV OF PROCUREMENT SERVICES 4330 EAST WEST HWY ROOM 523 BETHESDA MD 20814
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17a. CONTRACTOR/OFFEROR UNIVERSITY OF CINCINNATI 2600 CLIFTON AVE CINCINNATI OH 45220-2872	CODE	FACILITY CODE	18a. PAYMENT WILL BE MADE BY CPSC Accounts Payable Branch AMZ 160 P. O. Box 25710 Oklahoma City OK 73125	CODE FMFS
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17b. CHECK IF REMITTANCE IS DIFFERENT AND PUT SUCH ADDRESS IN OFFER <input type="checkbox"/>	18b. SUBMIT INVOICES TO ADDRESS SHOWN IN BLOCK 18a UNLESS BLOCK BELOW IS CHECKED <input type="checkbox"/> SEE ADDENDUM
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19. ITEM NO.	20. SCHEDULE OF SUPPLIES/SERVICES	21. QUANTITY	22. UNIT	23. UNIT PRICE	24. AMOUNT
	DUNS Number: XXXXXXXXXX Contracting Officer Representative (COR): Joanna Matheson Jmatheson@cpsc.gov 301-987-2564 Task Order 0002 to contract number CPSC-D-17-0001 is hereby issued for risk assessment services. The Contractor shall provide all necessary personnel, materials, and services for the performance period of June 12, 2017 through June <i>(Use Reverse and/or Attach Additional Sheets as Necessary)</i>				

25. ACCOUNTING AND APPROPRIATION DATA 0100A17DSE-2017-2370400000-EXHR004000-255A0	26. TOTAL AWARD AMOUNT (For Govt. Use Only) \$198,635.40
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27a. SOLICITATION INCORPORATES BY REFERENCE FAR 52 212-1, 52 212-4 FAR 52 212-3 AND 52 212-5 ARE ATTACHED <input type="checkbox"/>	ADDENDA <input type="checkbox"/> ARE <input type="checkbox"/> ARE NOT ATTACHED.
27b. CONTRACT/PURCHASE ORDER INCORPORATES BY REFERENCE FAR 52 212-4 FAR 52 212-5 IS ATTACHED <input type="checkbox"/>	ADDENDA <input type="checkbox"/> ARE <input type="checkbox"/> ARE NOT ATTACHED.

28. CONTRACTOR IS REQUIRED TO SIGN THIS DOCUMENT AND RETURN COPIES TO ISSUING OFFICE. CONTRACTOR AGREES TO FURNISH AND DELIVER ALL ITEMS SET FORTH OR OTHERWISE IDENTIFIED ABOVE AND ON ANY ADDITIONAL SHEETS SUBJECT TO THE TERMS AND CONDITIONS SPECIFIED <input type="checkbox"/>	29. AWARD OF CONTRACT OFFER DATED _____ YOUR OFFER ON SOLICITATION (BLOCK 5), INCLUDING ANY ADDITIONS OR CHANGES WHICH ARE SET FORTH HEREIN, IS ACCEPTED AS TO ITEMS: <input type="checkbox"/>
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30a. SIGNATURE OF OFFEROR/CONTRACTOR	31a. UNITED STATES OF AMERICA (SIGNATURE OF CONTRACTING OFFICER)
30b. NAME AND TITLE OF SIGNER (Type or print)	31b. NAME OF CONTRACTING OFFICER (Type or print) Eddie Ahmad
30c. DATE SIGNED	31c. DATE SIGNED 6/5/17

19 ITEM NO.	20 SCHEDULE OF SUPPLIES/SERVICES	21 QUANTITY	22 UNIT	23 UNIT PRICE	24 AMOUNT
0001	<p>11, 2018. All work shall be in accordance with the attached statement of work and contractor's final quote dated May 18, 2017.</p> <p>Risk Assessment Services - Commercialization Report and R&D Database on Nanomaterials</p> <p>The total amount of award: \$198,635.40. The obligation for this award is shown in box 26.</p>				198,635.40

32a. QUANTITY IN COLUMN 21 HAS BEEN

RECEIVED INSPECTED ACCEPTED, AND CONFORMS TO THE CONTRACT, EXCEPT AS NOTED: _____

32b. SIGNATURE OF AUTHORIZED GOVERNMENT REPRESENTATIVE _____ 32c. DATE _____ 32d. PRINTED NAME AND TITLE OF AUTHORIZED GOVERNMENT REPRESENTATIVE _____

32e. MAILING ADDRESS OF AUTHORIZED GOVERNMENT REPRESENTATIVE _____ 32f. TELEPHONE NUMBER OF AUTHORIZED GOVERNMENT REPRESENTATIVE _____
 32g. E-MAIL OF AUTHORIZED GOVERNMENT REPRESENTATIVE _____

33. SHIP NUMBER _____ 34. VOUCHER NUMBER _____ 35. AMOUNT VERIFIED CORRECT FOR _____ 36. PAYMENT _____ 37. CHECK NUMBER _____
 PARTIAL FINAL COMPLETE PARTIAL FINAL

38. S/R ACCOUNT NUMBER _____ 39. S/R VOUCHER NUMBER _____ 40. PAID BY _____

41a. I CERTIFY THIS ACCOUNT IS CORRECT AND PROPER FOR PAYMENT _____ 42a. RECEIVED BY (Print) _____
 41b. SIGNATURE AND TITLE OF CERTIFYING OFFICER _____ 41c. DATE _____ 42b. RECEIVED AT (Location) _____
 42c. DATE RECD (YY/MM/DD) _____ 42d. TOTAL CONTAINERS _____

**Statement of Work
Commercialization Report and RD Database
(Contract# CPSC-D-17-0001/ Task Order 0002)**

1. Description of Services

The contractor shall furnish all necessary personnel, materials not provided by CPSC, services, and facilities to perform the work set forth below.

The use of nanotechnology continues to expand in both the United States and other countries around the globe. It is estimated that revenues for nanotechnology and nanomaterials in consumer products were approximately \$1.55 billion in 2009 with the greatest revenues being generated by the electronics (\$480 million), automotive (\$240 million), and household care (\$275 million) markets. Other markets that typically fall under the U.S. Consumer Product Safety Commission's (CPSC) jurisdiction include textiles, sports, and packaging; 2009 revenues for nanotechnology in these markets were \$110 million, \$95 million, and \$45 million, respectively.

The market was expected to triple by 2015 to approximately \$5.3 billion, driven primarily by demand in the consumer electronics and household cleaning products segments. Because a large percentage of nano-enabled products fall under the jurisdiction of the CPSC, there is a need to track the use of nanotechnology in consumer products as well as the ongoing research and development efforts worldwide. Information on research and development will aid in identifying emerging nanomaterials, their potential use and applications, and their potential for harm.

Due to limitations in staff resources, analysis of the commercialization of nanotechnology both domestically and internationally has not been carried out for several years.

CPSC staff shall provide prior year draft commercialization reports (2008 and 2014) to assist the contractor with their assessment. In addition, CPSC shall provide the "contractor report" database that lists and ranks available market reports. As exemplified in the CPSC draft commercialization reports, CPSC staff have identified market reports that have been most informative, these include:

- The Freedonia Group (e.g., World Graphene 2016 Report)
- Lux Research: the nanotech report
- BCC Research (e.g., BCC 2017 report on Nanocomposites, Nanoparticles, Nanoclays, and Nanotubes)
- Future Markets, Inc. the work market for nanomaterial
- <http://www.giiresearch.com>
- Bharat Book Bureau (<http://www.bharatbook.com/market-research-report/nanotechnology.html>)

A common observation by CPSC staff is that various market reports provide the same information, thus staff have focused on a selection of sources to formulate the previous commercialization reports.

2. Description of Work

The contractor shall purchase relevant market reports and prepare a report describing the domestic and international market for nanomaterials. In addition, the report shall describe the market for specific nanomaterials of interest listed below:

- (1) Carbon based nanomaterials including carbon nanotubes, graphene, fullerenes
- (2) Metal oxides including titanium oxide, zinc oxide, iron oxide, cerium oxide
- (3) Nano silver
- (4) Nanowires
- (5) Nanofibers

These materials have been the subject of particular concern due to their widespread use and exposure potential. For each nanomaterial, properties of interest and current uses that may translate to consumer product application shall be indicated.

The contractor shall perform a search for information on nanotechnology research and development; both domestically and internationally. A database shall be assembled for each country that:

- provides a summary of the nature of the research (e.g., specific nanomaterials, specific method development)
- breaks down within each country the different research agencies or centers, organizations, and/or companies performing such work, and providing links (if available) to each organization/agency
- indicates whether R&D directed at understanding the environmental, health, and safety (EHS) impacts of nanotechnology as well as the corresponding risk assessment, risk management, and/or methods for risk mitigation is performed
- provides links to reports or publications if they are listed on a center's or organization's site

A starting point for the R&D database can be the OECD nanotechnology webpage which lists and provides links for nanotechnology-related resources (portals, networks and research facilities) by participating OECD country. The OECD nanotechnology webpage is found at: <http://www.oecd.org/sti/nano/nanotechnology-relatedresourcesportalsnetworksandresearchfacilitiesbycountry.htm>.

The contractor shall prepare a project plan detailing the contractor's planned activities, including but not limited to search strategies to efficiently identify the desired data. The contractor shall meet with the U.S. Consumer Product Safety Commission ("CPSC" or "Commission") staff by teleconference to discuss the plan prior to the commencement of the research. Any changes to the task list or project schedule shall be immediately communicated to the CPSC project officer by email, with an updated task list and/or project schedule delivered within seven calendar days.

The contractor shall conduct a progress report meeting at least once per month after the task is awarded with the Contracting Officer's Representative (COR) and/or designated staff. The project tasks and schedule will be reviewed. Technical issues, questions and other matters may

be discussed.

The contractor shall provide electronic copies of the report and a list of all references examined during the research. Copies of references cited shall be made available to the COR in paper or electronic form at the completion of the task. CPSC staff recognize that some of the market reports may involve a single user license and thereby cannot be shared with staff.

All documents delivered shall contain the following information:

1. Date;
2. Contract Number;
3. Contractor name; and
4. Document author.

3. Contract Type

This is a firm fixed price task order.

4. Background

Nanomaterials represent a wide range of compounds that are being used in consumer products with the stated purpose of improving the performance and durability of these products. Nanomaterials are defined as materials/particles that range from 1 to 100 nanometers (nm) in length. Although these materials may have the same chemical composition as non-nanomaterials, these new materials may vary significantly in their structure, physical and chemical properties, and potentially in their behavior in the environment and in the human body.

The unique physicochemical properties of engineered nanomaterials are exploited for use in a growing variety of commercial nano-enabled products including electronics, personal care products, sporting goods, clothing, building and structural materials, as well as a wide variety of products for medical applications. Nanotechnology with its vast applications is not a market per se, rather, it is an enabling technology for the development of both new opportunities within existing markets and entirely new markets.

The use of nanotechnology continues to expand in both the United States and other countries around the globe. It is estimated that revenues for nanotechnology and nanomaterials in consumer products were approximately \$1.55 billion in 2009 with the greatest revenues being generated by the electronics (\$480 million), automotive (\$240 million), and household care (\$275 million) markets. Other markets that typically fall under the U.S. Consumer Product Safety Commission's (CPSC) jurisdiction include textiles, sports, and packaging; 2009 revenues for nanotechnology in these markets were \$110 million, \$95 million, and \$45 million, respectively.

The market was expected to triple by 2015 to approximately \$5.3 billion, driven primarily by demand in the consumer electronics and household cleaning products segments. Because a large percentage of nano-enabled products fall under the jurisdiction of the CPSC, there is a need to

track the use of nanotechnology in consumer products as well as the ongoing research and development efforts worldwide. Information on research and development will aid in identifying emerging nanomaterials, their potential uses and applications, and their potential for harm.

This SOW proposes to provide a report describing the domestic and international market for nanomaterials. Furthermore, the report proposes to information tracking nanotechnology research and development (R&D) domestically and internationally. The assembled R&D database will provide information on emerging nanomaterials and research.

5. Objective

Under this task order, CPSC staff plans to search for data on emerging nanomaterials in the market as well as under development both domestically and internationally. The data obtained from these reports enables staff to track emerging nanomaterials and new uses of nanomaterials in consumer products as well as to assess the potential human health risk.

The objective of this task order is to acquire data to support agency determinations regarding the potential health hazard to consumers from nano-enabled consumer products.

6. Period of Performance

June 12, 2017 through June 11, 2018.

7. Government Furnished Materials

The government shall supply the draft 2008 and 2014 commercialization reports and the CPSC “contractor report” database for this contract.

8. Deliverables or Performance

The contractor shall provide the requested information in the form of a written report. The report shall be in the format of a scientific report with full citations and tables, as appropriate. The reviewer shall e-mail the report to the COR as Microsoft Word and Excel files.

9. Delivery Schedule

The contractor shall provide the service or deliverable listed in Table 1 per the delivery or performance listed.

Table 1. Delivery Schedule

Item(s)	Quantity	Delivery or Performance
The Contractor and CPSC Contracting Officer's Representative (COR) shall meet by teleconference to discuss and initiate the contractor's project plan.	1	Within 7 calendar days of the period of performance start date.
The Contractor shall finalize the search strategy and conduct a search on the nanomaterials market.	1	Within 60 calendar days of project initiation
The CPSC COR and Contractor shall meet by teleconference to discuss any adjustments to scope (e.g., the number of sources or studies available are greater than expected) based on the outcome of the search and provide the CPSC COR with an outline for the final report.	1	Within 7 calendar days of completion of the literature search
The Contractor and CPSC COR shall meet by teleconference for status	As appropriate.	At least once per month after project initiation.
The Contractor shall submit a draft final report to the CPSC COR.	1	Within 230 calendar days after the initial teleconference.
The CPSC COR will provide written comments on the draft final report to the Contractor.	1	Within 14 calendar days after receipt of the draft final report.
The Contractor shall submit a final report to the CPSC COR.	The Contractor shall revise the draft final report as appropriate	Within 30 calendar days after receipt of comments.
Inspection and Acceptance.	The Final report will be reviewed by the CPSC COR.	Within 14 calendar days after receipt of the report.

10. Place of Delivery

The contractor shall submit written materials by email to the COR, Joanna Matheson (jmatheson@cpsc.gov). If needed, the contractor may mail or send written materials by the deadlines to:

Joanna Matheson, Ph.D.
U.S. Consumer Product Safety Commission
5 Research Place
Rockville, MD 20850

Technical questions or clarifications about the documents shall be directed to Dr. Joanna Matheson at 301-987-2564 or jmatheson@cpsc.gov.

11. Inspection and Acceptance

The Draft Final report submitted to the CPSC will be reviewed within 14 calendar days of receipt of the draft final report for any additional questions and/or comments. If returned to the contractor as a result of the review, the contractor shall address and/or revise their report accordingly and return the final version to the COR within 30 calendar days of receipt. The CPSC COR will then have an additional 14 calendar days to review and accept the Final report.

12. Requirement for CPSC Clearance

The final report is the property of the U.S. Consumer Product Safety Commission. The Contractor shall not publish the final report, present the information at scientific meetings, or in any other way make the findings public in any form without the written permission of the COR. Any publication must be cleared in accordance with master contract clause LC21A Disclosure of Information – Limits on Publication.

CPSC Contracting Officer's Representative (COR) Designation Letter

COR Name: Joanna Matheson

CPSC Contract No. CPSC-D-17-0001/Task Order 0002

A. DESIGNATION OF COR

As a Contracting Officer (CO), I am responsible for ensuring and safeguarding the interests of the United States in its contractual relationships pursuant to the Federal Acquisition Regulation (FAR, 48 CFR Chapter 1) and agency policies. To assist in fulfilling these responsibilities, I hereby designate you as the Contracting Officer's Representative (COR) for this contract. You are in a unique position to monitor how well the contractor is progressing towards achieving the contract's purpose and will be responsible for being the technical liaison between the contractor and the Contracting Officer, which is critical to ensuring good contract performance.

As COR, your first responsibility is to read the entire contract and thoroughly acquaint yourself with the requirements it places on the contractor, the CO, and the COR. You should also periodically review the contract to maintain your familiarity with its terms and conditions.

This letter confirms that you are a government employee and are certified as a COR in accordance with the current Office of Management Budget memorandum on the Federal Acquisition Certification for Contracting Officer's Representatives (FAC-COR) guidance. As the COR you shall maintain the appropriate certification level as described in CPSC Directive No. 1521.1. This designation is not redelegable. As the designated COR, you may be personally liable for unauthorized acts. This designation is valid throughout the contract period cited in the contract.

B. COR LIMITATIONS

As the COR, you have no authority to make any commitments or changes that affect price, quality, quantity, delivery or other terms and conditions of the contract nor in any way direct the contractor or its subcontractors to operate in conflict with the contract terms and conditions. Only a CO has the authority to take such actions. You may be held personally liable, and may be subject to disciplinary action, for unauthorized actions, particularly if the action is determined to be a violation of the

Anti-Deficiency Act. You may only take actions that are within the authority provided in this letter of designation.

C. COR DUTIES AND RESPONSIBILITIES

You are designated and authorized to perform specific technical and administrative functions under this contract. As CO, I hereby delegate to you the following duties and responsibilities that are otherwise my responsibility:

1. Develop the contract specifications and/or performance work statement in such a manner as to promote competitive procurement actions.
2. Coordinate with the program office to ensure that technical requirements are incorporated into the resulting contract specifications and/or performance work statement.
3. Identify measurable performance objectives.
4. Identify potential contractors.
5. Perform technical evaluations as required.
6. Arrange for any required government-furnished equipment or facilities.
7. Ensure that the contractor has any necessary clearances to access the facility and data required by the contract.
8. Monitor and document contractor technical performance to assure that the contract terms and conditions are fully met and within the scope of the contract.
9. Inform the Contracting Officer when a contractor has not met contract requirements and coordinate with the Contracting Officer on any required corrective action.
10. Assist the Contracting Officer in the resolution of technical problems encountered during performance.
11. Submit performance reports in accordance with the Contractor Performance Assessment Reporting System (CPARS) requirements and agency policy.
12. Ensure that any requested changes to the resulting contract are formally effected by a written modification issued by the Contracting Officer before the contractor proceeds with the changes.
13. Perform inspection, acceptance or rejection of all deliverables in accordance with the terms of the contract.
14. Review and approve or disapprove the contractor requests for payment (invoice) to ensure that the invoice accurately reflects the service completed or product received in accordance with the requirements of the contract.
15. Maintain a contract working file that includes this designation letter, a copy of the contract award, modifications, correspondence, records of inspection, performance meetings, invoices and other documents describing the COR's duties,

responsibilities and actions taken in accordance with this delegation of authority.
This file is subject to review by the Contracting Officer.

D. STANDARDS OF CONDUCT AND CONFLICTS OF INTEREST

As the COR you are responsible for protecting the U.S. Government's interests, while supporting its reputation for fair and equal dealings with all partners, including contractors. Therefore, if you have any direct or indirect financial interests that may place you in a position where there is a conflict between your private interests and the public interest of the United States, you must immediately inform your supervisor, the Contracting Officer and the Office of General Counsel.

E. CONTRACTING OFFICER SIGNATURE:



Contracting Officer



Date

F. CONTRACTING OFFICER'S REPRESENTATIVE ACKNOWLEDGMENT:

I hereby accept this appointment and acknowledge my Duties and Responsibilities as COR.

Digitally signed by jmatheson@cpsc.gov
DN: cn=jmatheson@cpsc.gov
Date: 2017.06.05 09:28:17 -04'00'

Contracting Officer's Representative

Date