

Public Law 99-502, the Federal Technology Transfer Act of 1986, as amended.

**COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENT
(hereinafter "CRADA") No. AGMT-XXXX**

BETWEEN

**U.S. DEPARTMENT OF ENERGY
NATIONAL ENERGY TECHNOLOGY LABORATORY (hereinafter "NETL")**

AND

PARTICIPANT (hereinafter "Participant")

both being hereinafter referred to singly as "Party" and jointly as "Parties"

The Parties agree to enter into this CRADA as authorized by law and in accordance with the following terms and conditions:

ARTICLE I. DEFINITIONS

- A. "Background Intellectual Property" means the Intellectual Property identified by the Parties in Annex B, Background Intellectual Property, which was in existence prior to or is first produced outside of this CRADA, except that in the case of inventions in those identified items, the inventions must have been conceived outside of this CRADA and not first actually reduced to practice under this CRADA to qualify as Background Intellectual Property.
- B. "DOE" means the Department of Energy, an agency of the Government.
- C. "Generated Information" means information, including data, produced in the performance of this CRADA.
- D. "Government" means the Federal Government of the United States of America and agencies thereof.
- E. "Intellectual Property" means patents, trademarks, copyrights, Protected CRADA Information, and other forms of comparable property rights protected by Federal law and its foreign counterparts, except trade secrets.
- F. "NETL" is a Government-owned and Government-operated facility of the United States Department of Energy (DOE) that conducts energy research and development.

- G. "Proprietary Information" means information, including data, that embodies (i) trade secrets or (ii) commercial or financial information which is privileged or confidential under the Freedom of Information Act (5 U.S.C. 552(b)(4)), either of which is developed at private expense outside of this CRADA and is marked as Proprietary Information.
- H. "Protected CRADA Information" means Generated Information that is marked as being Protected CRADA Information by a Party to this CRADA and that would have been Proprietary Information had it been obtained from a non-Federal entity.
- I. "Subject Invention" means any invention of the Parties conceived or first actually reduced to practice in the performance of work under this CRADA.

ARTICLE II. STATEMENT OF WORK, TERM, FUNDING AND COSTS

- A. The Statement of Work is attached as Annex A.
- B. Notices: The names, postal addresses, telephone and email addresses for the Parties are provided in the Statement of Work. Any communications required by this CRADA, if given by postage prepaid first class U.S. Mail or other verifiable means addressed to the Party to receive the communication, shall be deemed made as of the day of receipt of such communication by the addressee, or on the date given if by email. Address changes shall be made by written notice and shall be effective thereafter. All such communications, to be considered effective, shall include the number of this CRADA.
- C. The effective date of this CRADA is the date on which it is signed by the last of the Parties. The work to be performed under this CRADA shall be completed within _____ months/years from the effective date.

- D. The total estimated value of the project is \$_____.

The Participant's total estimated contribution is \$_____, of which \$_____ is funds in to NETL and \$_____ is in-kind.

NETL's total estimated contribution is \$_____, of which \$_____ is funded by the Participant and \$_____ is in kind, subject to available funding.

[Option 1: For Participant's funds in greater than \$25,000 and a term period of longer than 60 days]

The Participant shall provide to NETL, prior to any work being performed under this CRADA, a budgetary resource sufficient to cover anticipated work that will be performed for The Participant's directly funded share for the first billing cycle. In

addition, the Participant shall provide 60 days of additional funding to ensure that funds remain available for the Participant's directly funded share for subsequent billing cycles. Failure of the Participant to provide the necessary advance funding is cause for termination of this CRADA in accordance with the Termination article.

[Option 2: For \$25,000 or less or a term period of shorter than 60 days]

The Participant shall provide to NETL all funding for its directly funded share prior to NETL beginning work paid for by that funding.

ARTICLE III. PERSONAL PROPERTY

Any tangible personal property produced or acquired in conducting work under this CRADA shall be owned by the Party paying for it. There will be no jointly funded property. Personal property shall be disposed of as directed by its owner at the owner's expense.

ARTICLE IV. DISCLAIMER

THE GOVERNMENT AND THE PARTICIPANT MAKE NO EXPRESS OR IMPLIED WARRANTY AS TO THE CONDITIONS OF THE RESEARCH OR ANY INTELLECTUAL PROPERTY, GENERATED INFORMATION, OR PRODUCT MADE OR DEVELOPED UNDER THIS CRADA, OR THE OWNERSHIP, MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE OF THE RESEARCH OR RESULTING PRODUCT. NEITHER THE GOVERNMENT NOR THE PARTICIPANT SHALL BE LIABLE FOR SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES.

ARTICLE V. PRODUCT LIABILITY

Except for any liability resulting from any negligent acts, willful misconduct or omissions of NETL, the Participant agrees to hold harmless the Government for all damages, costs, and expenses, including attorney's fees, arising from personal injury or property damage occurring as a result of the making, using, or selling of a product, process, or service by or on behalf of the Participant, its assignees, or licensees, which was derived from the work performed under this CRADA.

ARTICLE VI. RIGHTS TO SUBJECT INVENTIONS

The Parties agree to promptly disclose in writing to each other every Subject Invention in sufficient detail to comply with the provisions of 35 USC § 112 well before any statutory bars may arise under 35 USC § 102. Each Party shall have the first option to elect to retain title to any of its Subject Inventions. If a Party elects not to retain title to any of its Subject Inventions, then the other Party shall have the option of electing to retain title to such Subject Inventions under this CRADA. The Participant has the option to choose an exclusive license, for reasonable compensation, in a pre-negotiated field of use for any of DOE's Subject Inventions.

The Parties acknowledge that DOE may obtain title to each Subject Invention reported under this CRADA for which a patent application is not filed, a patent application is not prosecuted to issuance, or any issued patent is not maintained by either Party to this CRADA. The Government shall retain a nonexclusive, nontransferable, irrevocable, paid-up license to practice or to have practiced for or on behalf of the United States every Subject Invention under this CRADA throughout the world.

For Subject Inventions conceived or first actually reduced to practice under this CRADA which are joint Subject Inventions, title to such Subject Inventions shall be jointly owned by DOE and The Participant.

The Parties acknowledge that DOE has certain march-in rights to any Subject Inventions in accordance with 48 C.F.R. 27.304-1(g) and 15 U.S.C. 3710a(b)(1)(B) and (C).

ARTICLE VII. RIGHTS IN DATA

- A. The Parties shall have unlimited rights in and each of them shall have a right to use all Generated Information produced by, or information provided to, the Parties under this CRADA that is not marked as being Protected CRADA Information or as Proprietary Information.
- B. **PROPRIETARY INFORMATION:** Each Party agrees not to disclose properly marked Proprietary Information provided by the other Party to anyone other than the Participant, NETL and its subcontractors (if any) without written approval of the providing Party, except to Government employees who are subject to 18 U.S.C. 1905.
- C. **PROTECTED CRADA INFORMATION:** Each Party may designate and mark as Protected CRADA Information (PCI) any qualifying Generated Information produced by its employees. For a period of [REDACTED] **[NOT TO EXCEED 5 YEARS]** from the date it is produced, the Parties agree not to further disclose PCI except as necessary to perform this CRADA or as requested by DOE to be provided to other DOE facilities for use only at those DOE facilities solely for Government use with the same protections in place. Only Government employees who are subject to 18 U.S.C. 1905 may have access to PCI.
- D. **Cessation of Obligations Regarding PCI and Proprietary Information:** The obligations relating to the disclosure or dissemination of PCI and Proprietary Information shall end if any such information becomes known without fault of

either Party, or if such information is developed independently by a Party's employees who had no access to the PCI or Proprietary Information.

- E. **COPYRIGHT:** The Participant may assert Copyright in any of its Generated Information. The Parties hereby acknowledge that the Government or others acting on its behalf shall retain a royalty-free, non-transferable, nonexclusive, irrevocable worldwide copyright license to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, by or on behalf of the Government, in all copyrightable works produced in the performance of this CRADA, subject to the restrictions this Article places on publication of Proprietary Information and PCI.

ARTICLE VIII. U.S. COMPETITIVENESS

The Parties agree that a purpose of this CRADA is to provide substantial benefit to the U.S. economy.

In exchange for benefits received under this CRADA, the Participant therefore agrees to the following:

1. Products embodying Intellectual Property developed under this CRADA shall be substantially manufactured in the United States; and
2. Processes, services, and improvements thereof that are covered by Intellectual Property developed under this CRADA shall be incorporated into the Participant's manufacturing facilities in the United States either prior to or simultaneously with implementation outside the United States. Such processes, services, and improvements, when implemented outside the United States, shall not result in reduction of the use of the same processes, services, or improvements in the United States.

ARTICLE IX. EXPORT CONTROL

EACH PARTY IS RESPONSIBLE FOR ITS COMPLIANCE WITH EXPORT CONTROL LAWS AND REGULATIONS. EXPORT LICENSES OR OTHER AUTHORIZATIONS FROM THE U.S. GOVERNMENT MAY BE REQUIRED FOR THE EXPORT OF GOODS, TECHNICAL DATA OR SERVICES UNDER THIS AGREEMENT. THE PARTIES ACKNOWLEDGE THAT EXPORT CONTROL REQUIREMENTS MAY CHANGE AND THAT THE EXPORT OF GOODS, TECHNICAL DATA OR SERVICES FROM THE U.S. WITHOUT AN EXPORT LICENSE OR OTHER APPROPRIATE GOVERNMENTAL AUTHORIZATION MAY RESULT IN CRIMINAL LIABILITY.

ARTICLE X. REPORTS AND ABSTRACTS

The Parties agree to produce the following deliverables: an initial abstract suitable for public release and a final report, to include a list of Subject Inventions. The Participant acknowledges that NETL has the responsibility to timely provide the information to DOE's Office of Scientific and Technical Information (OSTI). The Participant agrees to provide the above information to NETL to enable NETL's full compliance with this Article.

The Participant agrees to submit, for a period of five years from the expiration of this CRADA and upon request of DOE, a non-proprietary report no more frequently than annually on the efforts to utilize any Intellectual Property arising under the CRADA.

Use of the name of a Party or its employees in any promotional activity, with reference to this CRADA, requires written approval of the other Party.

ARTICLE XI. FORCE MAJEURE

Neither Party will be liable for unforeseeable events beyond its reasonable control.

ARTICLE XIII. DISPUTES

The Parties shall attempt to jointly resolve all disputes arising under this CRADA. In the event a dispute arises under this CRADA, the Participant is encouraged to contact the NETL Technology Transfer Ombudsman in order to further resolve such dispute before pursuing third-party mediation or other remedies. If the Parties are unable to jointly resolve a dispute within a reasonable period of time, they agree to submit the dispute to a third-party mediation process that is mutually agreed upon by the Parties. To the extent there is no applicable U.S. federal law, this CRADA and performance thereunder shall be governed by the laws of the State of Pennsylvania without reference to that state's conflict of laws provisions.

ARTICLE XIV. ENTIRE CRADA, MODIFICATIONS, AND TERMINATION

This CRADA with its Annexes contains the entire agreement between the Parties in performing the research described in the Statement of Work (Annex A). Any agreement to materially change any terms or conditions of this CRADA or the Appendices shall be valid only if the change is made in writing and executed by the Parties hereto.

This CRADA may be terminated by either Party upon 30 days written notice to the other Party. If Article II provides for advance funding, this CRADA may also be terminated by NETL in the

event of failure by the Participant to provide the necessary advance funding. Each Party shall be responsible for its costs arising out of or as a result of a termination. The obligations of any clause of this CRADA that were intended to survive the expiration of the period of performance, for example, confidentiality, use and/or non-disclosure obligations, shall also survive any termination of this CRADA.

ARTICLE XI. ASSIGNMENT OF PERSONNEL

- A. Each Party may assign personnel to the other Party's facility to participate in or observe the research to be performed under this CRADA. Such personnel assigned by the assigning Party shall not during the period of such assignments be considered employees of the receiving Party for any purpose, including but not limited to any requirements to provide workers' compensation, liability insurance coverage, payment of salary or other benefits, or withholding of taxes.

The Participant may be required to provide information to NETL in order to facilitate its responsibilities associated with foreign national access to DOE sites, information, technologies and equipment. If the Participant, including its contractors, anticipates utilizing a foreign national in the performance of this CRADA, either on or off site, the Participant may be responsible for providing to NETL specific information regarding the foreign national to satisfy compliance with all of the NETL requirements for access approval. See Annex C for additional information regarding this requirement.

- B. Notwithstanding the foregoing, the receiving Party shall have the right to exercise routine administrative and technical oversight of the occupational activities of such personnel during the assignment period and shall have the right to approve the assignment of personnel or request their removal. The assigning Party's employees and agents shall observe the working hours, security and safety rules, and holiday schedule of the receiving Party while working on the receiving Party's premises.
- C. Unless otherwise agreed to by the Parties, the assigning Party shall bear any and all costs and expenses with regard to its personnel assigned to the receiving Party's facilities under this CRADA. The receiving Party shall bear facility costs of such assignments.
- D. The Parties agree to abide by the conditions set forth in Annex D, Access to DOE-Owned or Leased Facilities.

FOR Department of Energy:

FOR Participant:

BY: _____
Sean I. Plasynski, Ph.D.
Director (Acting), NETL

BY: _____
NAME
TITLE

DATE: _____

DATE: _____

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ANNEX A

Statement of Work

[To be included at the end of the SOW]

The addresses, telephone numbers, and email addresses for the Parties are as follows:

NETL

Technical Contact:

NAME OF NETL POC

Department of Energy
626 Cochran Mill Road
P.O. Box 10940
Pittsburgh, PA 15236-0940
Phone: 412.386.XXXX
Email: **EMAIL**

OR

Department of Energy
3610 Collins Ferry Rd
P.O. Box 880
Morgantown, WV 26507-0880
Phone: 304.285.XXXX
Email: **EMAIL**

OR

Department of Energy
1450 SW Queen Ave
Albany, OR 97321-2198
Phone: 541.xxx.xxxx
Email: **EMAIL**

Administrative Contact:

Jessica Lamp
Department of Energy
626 Cochran Mill Road
P.O. Box 10940
Pittsburgh, PA 15236-0940
Phone: 412.386.7417
Email: jessica.lamp@netl.doe.gov

Participant

Technical Contact:

NAME

ADDRESS

PHONE

EMAIL

Administrative Contact:

NAME

ADDRESS

PHONE

EMAIL

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ANNEX B

Background Intellectual Property

NETL: None

Participant: None

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ANNEX C

Foreign National Access Approval

1. Introduction:

It is in the interest of both the Government and the Participant to be aware of approval requirements for Foreign Nationals assigned work under this CRADA and how they relate to export controls, access to DOE sites, and access to DOE information, technologies, and equipment regardless of whether the work is performed at a DOE site or off-site location/facility.

2. Definitions:

Foreign national, as used in this clause, is defined in DOE Order 142.3, Unclassified Foreign Visits and Assignments Program.

Fundamental research, as used in this clause, is defined in National Security Decision Directive (NSDD) 189, National Policy on the Transfer of Scientific, Technical, and Engineering Information.

On-site, as used in this clause, is defined as a DOE site.

Off-site, as used in this clause, is defined as a location or facility not located on a DOE site, including the Participant's facilities/site.

3. Requirements:

DOE Order 142.3 requires processing for all foreign nationals seeking access to DOE sites, and access to DOE information, technologies, and equipment regardless of whether the work is performed on-site or off-site. Requests for access must be approved by DOE on an individual basis.

The Participant is required to complete form NETL F 142.1-1 Request for Unclassified Foreign National Visit, Assignment, or Access for any Foreign National identified to perform unclassified work under this CRADA (refer to DOE Order 142.3 for requirements related to classified work) at least forty-five days prior to site access. The NETL form is required for all individuals who will have access to DOE information, technologies, and equipment regardless of whether the work is performed on-site or off-site and all individuals who require access to DOE sites.

In accordance with 15 CFR 734.8(b) (Note 3 to paragraph (b)), if fundamental research is funded by the U.S. Government, compliance with DOE Order 142.3 will result in preservation of any application of the exception to Export Administration Regulations (EAR) found at 15 CFR. Violation of the control requirements set forth in this award, and subsequently required in flow-down requirements, may result in non-application of the available EAR exception.

The Iran Threat Reduction and Syria Human Rights Act of 2012, H.R. 1905, excludes citizens of Iran from entering the United States and seeking education relating to the nuclear and energy sectors of Iran.

4. References:

DOE Order 142.3, Unclassified Foreign Visits and Assignments Program

15 CFR 730-780, Export Administration Regulations (EAR)

National Security Decision Directive (NSDD) 189, National Policy on the Transfer of Scientific, Technical, and Engineering Information

H.R. 1905, Iran Threat Reduction and Syria Human Rights Act of 2012

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ANNEX D**Access to DOE–Owned or Leased Facilities**

- A. The performance of this CRADA requires that employees of the Participant have physical access to DOE-owned or leased facilities; however, this clause does not control requirements for an employee's obtaining a security clearance. The Participant understands and agrees that DOE has a prescribed process with which the Participant and its employees must comply in order to receive a security badge that allows such physical access.
- B. The Participant shall assure:
1. In initiating the process for gaining physical access, (i) compliance with procedures established by DOE in providing its employee(s) with any forms directed by DOE, (ii) that the employee properly completes any forms, and (iii) that the employee(s) submits the forms to the DOE officials responsible for granting access to DOE–owned or leased facilities.
 2. In completing the process for gaining physical access, that its employee (i) cooperates with DOE officials responsible for granting access to DOE–owned or leased facilities and (ii) provides additional information, requested by those DOE officials.
- C. The Participant understands and agrees that DOE may unilaterally deny a security badge to an employee and that the denial remains effective for that employee unless DOE subsequently determines that access may be granted. Upon notice from DOE that an employee's application for a security badge is or will be denied, the Participant shall promptly identify and submit the forms referred to in subparagraph (B)(1) of this clause for the substitute employee. The denial of a security badge to individual employees by DOE shall not be cause for extension of the period of performance of this CRADA or any Participant claim against DOE.
- D. The Participant shall return to the DOE officials responsible for granting access to DOE–owned or leased facilities the badge(s) or other credential(s) provided by DOE pursuant to this clause, granting physical access to DOE-owned or leased facilities by the Participant's employee(s), upon (1) the termination of this CRADA; (2) the expiration of this CRADA; (3) the termination of employment on this CRADA by an individual employee; or (4) demand by DOE for return of the badge.
- E. All questions and compliance issues should be directed to the NETL Security Officer.

IDENTIFICATION BADGES - NETL

All personnel working at NETL will be required to wear identification badges at all times. Identification badges will be assigned to a Participant official for issuance to the personnel employed for work under this CRADA.

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