

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 (NETL)**

AND

**NAME OF PARTY
(hereinafter "Nickname of PARTY")
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 Appendix 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 engaged in the conduct of energy research and development.
- G. "Proprietary Information" means information, including data, which 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 which is marked as being Protected CRADA Information by a Party to this CRADA and which 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.
- J. "Unlimited Rights" means the right to use, disclose, reproduce, prepare derivative works distributed to the public, and perform publicly or display publicly in any manner or for any purpose, or to permit others to do so.

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

- A. The Statement of Work is attached as Appendix A.
- B. The effective date of this CRADA shall be 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.
- C. Nickname of Party's estimated contribution is \$ _____, of which \$ _____ is funds in to NETL. NETL's estimated contribution is \$ _____, subject to available funding.

[For CRADAs which include (non-Federal) funding on a funds-in basis, an advance payment provision will be negotiated consistent with current DOE policy.]

Option 1: [For greater than \$25,000 of work and a term period of longer than 60 days] Nickname of Party shall provide to NETL, prior to any work being performed, a budgetary resource sufficient to cover anticipated work that will be performed for Nickname of Party's directly funded share for the first billing cycle. In addition, Nickname of Party shall provide 60 days of additional funding to ensure that funds remain available for Nickname of Party's directly funded share for subsequent billing cycles.

Option 2: *[For \$25,000 or less and a term period of shorter than 60 days.]* Nickname of Party shall provide to NETL full funding prior to beginning work covered by those funds.

ARTICLE III. PERSONAL PROPERTY

All tangible personal property produced or acquired under this CRADA shall become the property of Nickname of Party or the Government, depending upon whose funds were used to obtain it, unless identified in the Statement of Work as being owned by the other Party. Personal property shall be disposed of as directed by its owner at the owner's expense. There shall not be any jointly funded property under this CRADA except by the mutual agreement of the Parties. Nickname of Party shall maintain records of receipt, expenditures, and the disposition of all Government property in its custody related to this CRADA.

ARTICLE IV. DISCLAIMER

THE GOVERNMENT AND NICKNAME OF PARTY 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 NICKNAME OF PARTY SHALL BE LIABLE FOR SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES ATTRIBUTED TO SUCH RESEARCH OR RESULTING PRODUCT, INTELLECTUAL PROPERTY, GENERATED INFORMATION, OR PRODUCT MADE OR DEVELOPED UNDER THIS CRADA.

ARTICLE V. PRODUCT LIABILITY

Except for any liability resulting from any negligent acts, willful misconduct or omissions of NETL, Nickname of Party hereby agrees to indemnify 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 Nickname of Party, its assignees, or licensees, which was derived from work performed under this CRADA. In respect to this article, the Government shall not be considered an assignee or licensee of Nickname of Party as a result of reserved Government rights. The indemnity arising from this article shall apply only if Nickname of Party shall have been informed as soon and as completely as practical by the Government of the action alleging such claim, and Nickname of Party shall have been given an opportunity, to the maximum extent afforded by applicable laws, rules, or regulations, to participate in and control its defense, and the Government shall have provided all reasonably available information and assistance requested by the Party. No settlement for which Nickname of Party would be responsible shall be made without Nickname of Party's consent unless required by final decree of a court of competent jurisdiction.

ARTICLE VI. RIGHTS IN SUBJECT INVENTIONS

Wherein DOE has granted **Nickname of Party** the right to elect to retain title to **Nickname of Party's** Subject Inventions, and wherein **Nickname of Party** has the option to choose an exclusive license, for reasonable compensation, for a pre-negotiated field of use for DOE's Subject Inventions,

- A. Each Party shall have the first option to elect to retain title to any of its Subject Inventions and that election shall be made within 12 months of disclosure of the Subject Invention to the other Party. However, such election shall occur not later than 60 days prior to the time when any statutory bar might foreclose filing of a U.S. Patent application. The electing Party has one year to file a patent application after such election unless any statutory bar exists. If a Party elects not to retain title to any of its Subject Invention or fails to timely file a patent application, the other Party shall have the option to elect to obtain title to such Subject Invention within the time period specified in paragraph B below. For Subject Inventions that are joint Subject Inventions of the DOE and the **Nickname of Party**, title to such Subject Inventions shall be jointly owned by the DOE and the **Nickname of Party**.
- B. **Nickname of Party** agrees to assign to DOE, as requested by DOE, the entire right, title and interest in any country to each Subject Invention where **Nickname of Party** (1) does not elect pursuant to this article to retain/obtain such rights, or (2) elects to retain/obtain title to a Subject Invention but fails to have a patent application filed in that country on the Subject Invention or decides not to continue prosecution or not to pay any maintenance fees covering the Subject Invention. If DOE is granted a patent on **Nickname of Party's** Subject Invention, **Nickname of Party** may request a non-exclusive license and DOE will determine whether to grant such license pursuant to statutory authority.
- C. **Nickname of Party** acknowledges that the Government retains 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. **Nickname of Party** agrees to execute a Confirmatory License to affirm the Government's retained license.
- D. The Parties agree to disclose to each other each Subject Invention that may be patentable or otherwise protectable under the U.S. patent laws. The Parties agree that they will disclose their Subject Inventions within two (2) months after the inventor first discloses the Subject Invention in writing to the person(s) responsible for patent matters of the disclosing Party.

These disclosures should be made in sufficiently complete technical detail to convey a clear understanding to the extent known at the time of the disclosure, of the nature, purpose, and operation of the Subject Invention. The disclosure shall also identify any known actual or potential statutory bars, e.g., printed publications describing the Subject Invention or the public use or “on sale” of the Subject Invention. The Parties further agree to disclose to each other any subsequently known actual or potential statutory bar that occurs for a Subject Invention disclosed but for which a patent application has not been filed. All invention disclosures shall be marked and treated as confidential under 35 U.S.C. 205.

- E. **Nickname of Party** agrees to include within the beginning of the specification of any U.S. patent applications and any patent issuing thereon (including non-U.S. patents) covering a Subject Invention, the following statement: “This invention was made under a CRADA (**identify CRADA number**) between (**Name of Party**) and NETL, owned and operated by the United States Department of Energy. The Government has certain rights in this invention.”
- F. **Nickname of Party** acknowledges that DOE has certain march-in rights to any of its Subject Inventions in accordance with 48 C.F.R. 27.304-1(g) and 15 U.S.C. 3710a(b)(1)(B) and (C).
- G. **Nickname of Party** agrees to submit, for a period of five (5) years from the date of termination or completion of this CRADA and upon request of DOE, a nonproprietary report no more frequently than annually on efforts to utilize any Intellectual Property arising under this CRADA including information regarding compliance with the U.S. Competitiveness provision of this CRADA.
- H. **Nickname of Party** shall have the option to choose an exclusive license for **[SPECIFY THE PRE-NEGOTIATED FIELD OF USE]** for any patents or patent applications made in whole or in part by employees of NETL under this CRADA. This option shall only be available to **Nickname of Party** for a period of twelve months after DOE reports the invention to **Nickname of Party** or such longer time as may be approved by DOE. The Parties agree to negotiate in good faith to enter a separate mutually agreeable license agreement, including reasonable compensation, commercialization milestones, a U.S. Competitiveness Clause, March-in Provisions and other reasonable terms and conditions. If such license agreement is not completed within one year of initiation of good faith negotiations, DOE reserves the right to grant licenses to others in any and all possible applications.

ARTICLE VII. RIGHTS IN DATA

- A. The Parties shall have unlimited rights in all Generated Information produced or provided by a Party under this CRADA, except for information which is: (a) disclosed in a Subject Invention disclosure being considered for patent protection, or (b) marked as being copyrighted or as Protected CRADA Information or as Proprietary Information.
- B. **PROPRIETARY INFORMATION:** Each Party agrees to not disclose Proprietary Information provided by the other Party to anyone other than **Nickname of Party**, NETL and its subcontractors (if any) performing work under this CRADA without written approval of the providing Party, except to Government employees who are subject to the statutory provisions against disclosure of confidential information set forth in the Trade Secrets Act (18 U.S.C. 1905). Government employees shall not be required to sign non-disclosure agreements due to the protections already provided by this Act.

If Proprietary Information is orally disclosed to a Party, it shall be identified as such, orally, at the time of disclosure and confirmed in a written summary thereof, appropriately marked by the disclosing Party, within ten (10) days as being Proprietary Information.

All Proprietary Information shall be protected for a period of years from the effective date of this CRADA, unless such Proprietary Information shall become publicly known without the fault of the receiving party, shall come into the receiving party's possession without breach by that Party of any of the obligations set forth herein, can be demonstrated by the receiving party by written record that it is known prior to receipt from the disclosing Party, is disclosed by operation of law, or is independently developed by the receiving party's employees who did not have access to such Proprietary Information.

- C. **PROTECTED CRADA INFORMATION:** Except where **Nickname of Party's** Federal funding agreement prohibits such protection, each Party may designate and mark as Protected CRADA Information any Generated Information produced by its employees, that meets the definition in Article I and, and with the agreement of the other Party, so designate any Generated Information produced by the other Party's employees, which meets the definition in Article I. All such designated Protected CRADA Information shall be appropriately marked.

For a period of [NOT TO EXCEED 5 YEARS] from the date Protected CRADA Information is produced, the Parties agree not to further disclose such Information and to use the same degree of care and discretion, but no less than reasonable care and discretion, to avoid disclosure, publication or dissemination of such information to a third party, as the Party employs for similar protection of its own information which it does not desire to disclose, publish, or disseminate except:

- (1) as necessary to perform this CRADA;
- (2) as published in a patent application or an issued patent before the protection period expires;
- (3) as provided in Article X (REPORTS AND PUBLICATIONS);
- (4) as provided to other DOE facilities for use only at those DOE facilities solely for Government use with the same protection in place and marked accordingly;
- (5) when a specific maximum time period for delaying the public release of data is authorized in the terms of a Government funding agreement used to fund this CRADA and that maximum period is shorter than the time period set forth in this Article for protecting Protected CRADA Information;
- (6) as provided to existing or potential licensees, affiliates, customers, or suppliers of the Parties in support of commercialization of the technology with the same protection in place. Disclosure of Nickname of Party's Protected CRADA Information under this subparagraph shall only be done with Nickname of Party's consent; or
- (7) as mutually agreed to by the Parties in advance.

The obligations of this article shall end sooner for any Protected CRADA Information which shall become publicly known without fault of either Party, shall come into a Party's possession without breach by that Party of the obligations above, or shall be independently developed by a Party's employees who did not have access to the Protected CRADA Information. Federal Government employees who are subject to 18 U.S.C. 1905 may have access to Protected CRADA Information and shall not be required to sign non-disclosure agreements due to the protections already provided by that statute.

- D. **COPYRIGHT:** **Nickname of Party** may assert Copyright in any of its Generated Information. Assertion of copyright generally means to enforce or give an indication of an intent or right to enforce such as by marking or securing Federal registration. Copyrights in co-authored works by employees of the Parties shall be held by **Nickname of Party**, and use by either Party shall be without accounting.

For all Generated Information, the Government has for itself, and for others acting on its behalf, 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 copyrighted works produced in the performance of this CRADA, subject to the restrictions this Article places on publication of Proprietary Information and Protected CRADA Information.

The Parties agree that no computer software will be created under this CRADA. If the scope of work changes so that **Nickname of Party** will create computer software, then the CRADA will be amended accordingly.

Nickname of Party agrees to place Copyright and other notices, as appropriate for the protection of Copyright, in human-readable form onto all physical media, and in digitally encoded form in the header of machine-readable information recorded on such media such that the notice will appear in human-readable form when the digital data are off loaded or the data are accessed for display or printout.

ARTICLE VIII. U.S. COMPETITIVENESS

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

In exchange for benefits received under this CRADA, **Nickname of Party** 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 **Nickname of Party**'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.

(Alternate)

A Plan for providing net benefit to the U.S. economy is attached in Appendix C.

ARTICLE IX. EXPORT CONTROL

THE PARTIES UNDERSTAND THAT MATERIALS OR INFORMATION RESULTING FROM THE PERFORMANCE OF THIS CRADA MAY BE SUBJECT TO EXPORT CONTROL LAWS AND THAT EACH PARTY IS RESPONSIBLE FOR ITS COMPLIANCE WITH SUCH LAWS. 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 PUBLICATIONS

- A. The Parties agree to produce the following deliverables to be provided to DOE's Office of Scientific and Technical Information (OSTI):
- (1) an initial abstract suitable for public release at the time the CRADA is executed;
 - (2) a final report, upon completion or termination of this CRADA, to include a list of subject inventions; and
 - (3) other scientific and technical information in any format or medium that is produced as a result of this CRADA that is useful to the Government or the public as specified by and upon request from DOE no later than two years from submission of the final report to OSTI.

Nickname of Party acknowledges that NETL has the responsibility to timely provide the information to OSTI.

- B. The Parties agree to secure pre-publication review from each other wherein the non-publishing Party shall provide within 30 days any written objections to be considered by the publishing Party.

- C. The Parties agree that neither will use the name of the other Party or its employees in any promotional activity, such as advertisements, with reference to any product or service resulting from this CRADA without prior written approval of the other Party.

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.

Nickname of Party 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 **Nickname of Party**, including its contractors, anticipates utilizing a foreign national in the performance of this CRADA, either on or off site, the **Nickname of Party** 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.

- 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.

ARTICLE XII. FORCE MAJEURE

No failure or omission by **Nickname of Party** or NETL in the performance of any obligation under this CRADA shall be deemed a breach of this CRADA or create any liability if the same shall arise from any cause or causes beyond the control of the Party or NETL, including but not limited to the following, which, for the purpose of this CRADA, shall be regarded as beyond the control of

the Party in question: Acts of God; acts or omissions of any government or agency thereof; compliance with requirements, rules, regulations, or orders of any governmental authority or any office, department, agency, or instrumentality thereof; fire; storm; flood; earthquake; accident; acts of the public enemy; war; rebellion; insurrection; riot; sabotage; invasion; quarantine; restriction; transportation embargoes; or failures or delays in transportation.

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, **Nickname of Party** 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 60 days, they agree to submit the dispute to a third-party mediation process that is mutually agreed upon by the Parties. This CRADA and performance thereunder shall be governed by U.S. Federal law.

ARTICLE XIV. ENTIRE CRADA, MODIFICATIONS, AND TERMINATION

- A. This CRADA with its Appendices constitutes the entire agreement between the Parties with respect to the subject matter hereof and all prior representations or agreements relating hereto have been merged into this document and are thus superseded in totality by this CRADA.
- B. 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.
- C. This CRADA may be terminated by either Party upon 30 days written notice to the other Party. If Article III provides for advance funding, this CRADA may also be terminated by NETL in the event of failure of **Nickname of Party** to provide the necessary advance funding.

In the event of termination by either Party, each Party shall be responsible for its share of the costs incurred through the effective date of termination, as well as its share of the costs incurred after the effective date of termination, and which are related to the termination.

ARTICLE XV. NOTICES

- A. 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 given if by verified facsimile. All such communications, to be considered effective, shall include the number of this CRADA.
- B. The addresses, telephone numbers and email numbers for the Parties are as follows:

NETL

Technical Contact:

NAME OF NETL POC

Department of Energy
626 Cochrans 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

Administrative Contact:

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

Nickname of Party

Technical Contact:

NAME
ADDRESS
PHONE
EMAIL

Administrative Contact:

NAME
ADDRESS
PHONE
EMAIL

FOR Name Of Party:

FOR Department Of Energy:

BY: _____

NAME
TITLE

BY: _____

Grace M. Bochenek, Ph.D.
Director, NETL

DATE: _____

DATE: _____

APPENDIX A

Statement of Work

NOTE: SOW includes

- Technical description of the scope proposed
- Tasks
 - Party responsible for the tasks
- List of deliverables
- Principal Investigator for each Party
- Who will provide what funds, personnel, services, and property
- Who will do what reporting
- Procedures for interaction between the Parties to accomplish the SOW
- Any Proprietary Information in the SOW must be marked as such
 - Should not be included unless absolutely necessary
 - Name of Party is not proprietary

APPENDIX B

Background Intellectual Property

APPENDIX C

Plan for Providing Net Benefit to the U.S. Economy