

(NOTE: DOE does not permit UT-Battelle to negotiate the terms of this agreement)

STEVENSON-WYDLER (15 U.S.C. 3710a)
SHORT-FORM COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENT
(hereinafter “CRADA”)

No. NFE-2X-0XXXX

BETWEEN

UT-Battelle, LLC
under its U.S. Department of Energy Contract No. DE-AC05-00OR22725
(hereinafter “Contractor”)

AND

Participant
(hereinafter “Participant”),

both being hereinafter jointly referred to as the “Parties.”

ARTICLE I: DEFINITIONS

- A. “Government” means the United States of America and agencies thereof.
- B. “DOE” means the Department of Energy, an agency of the United States of America.
- C. “Contracting Officer” means the DOE employee administering the Contractor’s DOE contract.
- D. “Generated Information” means information produced in the performance of this CRADA.
- E. “Proprietary Information” means information which is developed at private expense outside of this CRADA, is marked as Proprietary Information, and embodies: (1) trade secrets; or (2) commercial or financial information which is considered privileged or confidential under the Freedom of Information Act [5 USC 552 (b)(4)].
- F. “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.
- G. “Subject Invention” means any invention of the Contractor or Participant conceived of or first actually reduced to practice in the performance of work under this CRADA.
- H. “Intellectual Property” means patents, trademarks, copyrights, mask works, Protected CRADA Information and other forms of comparable property rights protected by Federal law and other foreign counterparts.
- I. “Background Intellectual Property” means the Contractor’s Intellectual Property identified by the Contractor 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.

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

- A. Appendix A is the Statement of Work.
- B. The effective date of this CRADA shall be the latter date of: (1) the date on which it is signed by the last of the Parties; or (2) the date on which it is approved by DOE. The work to be performed under this CRADA shall be completed within ??? (XX) months from the effective date.
- C. The Participant's estimated contribution is \$XX,XXX, which includes \$XX,XXX funds-in. The Government's estimated contribution, which is provided through Contractor's contract with DOE, is \$XX,XXX, subject to available funding.
- D. For CRADAs that include (non-Federal) funding on a funds-in basis, the Participant shall provide Contractor, prior to any work being performed, a budgetary resource sufficient to cover the anticipated work that will be performed during the first billing cycle. In addition, the Participant shall provide sixty (60) days of additional funding to ensure that funds remain available for project during subsequent billing cycles. Failure of Participant to provide the necessary advance funding is cause for termination of this CRADA in accordance with Article XIII of this CRADA. A billing cycle is the period of time between billings, usually thirty (30) days. The billing cycle is complete when the customer is billed for services rendered.

ARTICLE III: PERSONAL PROPERTY

Any tangible personal property produced or acquired in conducting the 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 the owner at the owner's expense.

ARTICLE IV: DISCLAIMER

THE GOVERNMENT, THE PARTICIPANT, AND THE CONTRACTOR 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, THE PARTICIPANT, NOR THE CONTRACTOR 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, or willful misconduct or omissions of Contractor or Government, Participant agrees to hold harmless the Government and the Contractor for all damages, cost and expenses, including attorney's fees, arising from personal injury or property damage 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 IN 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 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, to the Contractor's Subject Inventions, in the field of use of **Field of Use**.

The Parties acknowledge that the DOE may obtain title to each Subject Invention reported under this Article 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, non-transferable, irrevocable, paid-up license to practice, or to have practiced, for or on its behalf all Subject Inventions throughout the world.

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

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

ARTICLE VII: RIGHTS IN DATA

- A. The Parties and the Government shall have unlimited rights and each of them shall have a right to use all Generated Information produced by, or information provided to, the Parties under this CRADA which is not marked as being Protected CRADA Information or Proprietary Information.
- B. PROPRIETARY INFORMATION: Each Party agrees to not disclose properly marked Proprietary Information provided by the other Party to anyone other than the providing Party without the written approval of the providing Party, except to Government employees who are subject to 18 USC 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 **??? (X)** years [not to exceed five years] from the date it is produced, the Parties agree not to further disclose such PCI except as necessary to perform this CRADA or as requested by the DOE Contracting Officer to be provided to other DOE facilities for use only at those DOE facilities with the same protection in place and marked accordingly. Government employees who are subject to 18 USC 1905 may have access to PCI.
- D. CESSATION OF OBLIGATIONS REGARDING PCI AND PROPRIETARY INFORMATION: The obligations relating to the disclosure or dissemination of Protected CRADA Information 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 Parties may assert copyright in any of their Generated Information. The Parties hereby acknowledge that the Government or others acting on its behalf shall retain a nonexclusive, royalty-free, worldwide, irrevocable, non-transferable license to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, by or on behalf of the Government, all copyrightable works produced in the performance of this CRADA, subject to the restrictions this CRADA places on publication of Proprietary Information and Protected CRADA Information.

If a Party copyrights computer software produced in the performance of this CRADA, the Party will provide the source code, object code, and expanded abstract, and the minimum support documentation needed by a competent user to understand and use the software to DOE's Energy Science and Technology Software Center (ESTSC) via www.osti.gov/estsc. The Party shall inform ESTSC when it abandons or no longer commercializes the computer software. Until such notice to

ESTSC, the Government has for itself and others acting on its behalf, a royalty-free, nontransferable, nonexclusive, irrevocable worldwide copyright license to reproduce, prepare derivative works, and perform publicly and display publicly, by or on behalf of the Government (narrow license). After the Party owning the Computer Software abandons or no longer commercializes the Computer Software, the Government has for itself and others acting on its behalf, a royalty-free, nontransferable, 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 (broad license).

ARTICLE VIII: U.S. COMPETITIVENESS

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

- A. In exchange for the 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 which 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.
- B. The Contractor agrees to a U.S. Industrial Competitiveness clause in accordance with its prime contract with respect to any licensing and assignments of its Intellectual Property arising from this CRADA, except that any licensing or assignment of its intellectual property rights to the Participant shall be in accordance with the terms of Paragraph A of this Article.

ARTICLE IX: EXPORT CONTROL

EACH PARTY IS RESPONSIBLE FOR ITS OWN 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:

- 1. an initial abstract suitable for public release; and
- 2. a final report, to include a list of Subject Inventions.

It is understood that the Contractor has the responsibility to provide this information at the time of its completion to the DOE Office of Scientific and Technical Information. The Participant agrees to provide the above information to the Contractor to enable full compliance with this Article.

The Parties agree to submit, for a period of five (5) 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 XII: DISPUTES

The Parties shall attempt to jointly resolve all disputes arising from this CRADA. In the event a dispute arises under this CRADA, the Participant is encouraged to contact Contractor's Technology Partnership 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 that there is no applicable U.S. Federal law, this CRADA and performance thereunder shall be governed by the laws of the State Tennessee without reference to that state's conflict of laws provisions.

ARTICLE XIII: ENTIRE CRADA, MODIFICATIONS, ADMINISTRATION AND TERMINATION

This CRADA with its appendices contains the entire agreement between the Parties in performing the research described in the Statement of Work (Appendix A) and becomes effective on the later date of either the date the last Party signs the document or receipt of advance funding, if any. Any agreement to materially change any terms or conditions of the CRADA and appendices shall be valid only if the change is made in writing, executed by the Parties, and approved by DOE.

This CRADA may be terminated by either Party with sixty (60) days' written notice to the other Party. If Article II provides for advance funding, this CRADA may also be terminated by the Contractor in the event of failure by the Participant to provide the necessary advance funding. Each Party will be responsible for its own costs arising out of or as a result of this 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.

For PARTICIPANT**For CONTRACTOR**

Signature

Signature

Participant Signatory's Name

Leslie M. Smith*Name**Name*

Participant Signatory's Title

Manager, Strategic Partnerships Agreements*Title**Title*

Date

Date

Appendix A

STATEMENT OF WORK

for

CRADA No. NFE-2X-0XXXX

with

Participant

for

Title of CRADA

[GENERAL NOTE: BE SURE TO REFER TO UT-BATTELLE AND/OR OAK RIDGE NATIONAL LABORATORY AS “CONTRACTOR,” AND TO THE COLLABORATING PARTNER AS “PARTICIPANT,” THROUGHOUT THIS DOCUMENT (ANYWHERE BELOW THIS POINT IN THE DOCUMENT). BE SURE TO: (1) DEFINE ALL ACRONYMS; (2) RUN SPELL AND GRAMMAR CHECK BEFORE SUBMITTING. RED FONT INDICATES INFORMATION THAT NEEDS TO BE FILLED IN BY THE PI. WHEN COMPLETED, DELETE THE ITALICIZED SOW INSTRUCTIONS.]

Purpose and Background

[State the purpose of the CRADA.

Provide background information, such as the nature of the problem, results of previous studies, if any.

Describe the expected goals or accomplishments and benefits of the project.

Provide a statement of the desired results/products.]

Scope of Work

[Describe the technical objective(s) of the CRADA.

Break down the work by tasks

Under each task:

- *Describe the objective for the task;*
- *Define the task responsibilities for each Party (CRADAs must be collaborative, and therefore the Statement of Work needs to clearly demonstrate the collaborative nature of the project and there must be task participation shown for each Party); and*
- *List the completion date (by Project Month—number of months after the effective date of the CRADA) for each task.*
- *The last task should be shown as completion of a CRADA Final Report]*

Task 1

Task 2**Task 3****Task 4****Task 5****Etc.****Property Considerations**

The following tangible property will be exchanged: *[Is any property changing hands? Either list property to be exchanged or state "None."]* The disposition of this property shall be in accordance with CRADA Article III: PERSONAL PROPERTY.

Estimated Cost and Source of Support

The contributions by each Party are specified in CRADA Article II, Paragraph C. The flow of funds is summarized below for each Project Year (PY), inclusive of any applicable Federal Administrative Charges (FAC)*.

Parties	PY 1	PY 2	PY 3	PY 4	PY 5	Total
DOE's Contribution via Contractor:	\$	\$	\$	\$	\$	\$
Participant						
Funds-In:	\$	\$	\$	\$	\$	\$
In-Kind:	\$	\$	\$	\$	\$	\$
Totals:	\$	\$	\$	\$	\$	\$

*FAC is mandated by Section 3137 of the Strom Thurmond National Defense Authorization Act of 1999 (Public Law 105-261); does not apply if there are no funds-in from Participant.

Deliverables

In addition to the minimum deliverables shown in Article X of the CRADA, the following will be delivered: *[List any additional milestones or deliverables and the Project Month in which each milestone or deliverable is due.]*

Schedule

The duration of this project is *[State the period of performance in months or years, i.e., 6 months or 2 years. As a reminder, projects tend to start slowly especially since there are multiple approvals and notifications that must occur, and accounts have to be opened, before work starts. In addition, all work including the final report must be completed within the period of performance. Please factor in these*

items when developing your schedule and include review time of the report by the partner. Any project management projections (Gantt charts, etc.) may be included in this section, if desired.]

Program Management

The principal investigators for this CRADA are **ORNL Principal Investigator** (Contractor) and **Participant Principal Investigator** (Participant). *[State here any plans or requirements for program management or reporting to keep the project on track, such as periodic meetings between the PIs, monthly, quarterly, yearly, etc. reports, and the like.]*

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Appendix B

BACKGROUND INTELLECTUAL PROPERTY

The Contractor has identified the following Background Intellectual Property, which may be used in its performance of work under this CRADA and may be needed to practice the results of this CRADA:

[List BIP here, including name of invention/copyright, internal ID number, status of intellectual property protection, etc., or state “None.”]

The Contractor has used reasonable efforts to list all relevant Background Intellectual Property, but Intellectual Property may exist that is not identified. The Contractor shall not be liable to the Participant because of failure to list Background Intellectual Property.