STEVENSON-WYDLER (15 U.S.C. 3710)

SHORT FORM MODEL COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENT (hereinafter “CRADA”) No. NFE-1X-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 DOE’s contract with the Contractor.

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 nonfederal entity.

G. "Subject Invention" means any invention of the Contractor or Participant conceived 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.

ARTICLE II: STATEMENT OF WORK

Appendix A is the Statement of Work.
ARTICLE III: TERM, FUNDING AND COSTS
A. The work to be performed under this CRADA shall be completed within ??? (XX) months from the effective date. (See also Article XVIII.)
B. The Participant's estimated contribution is $XX,XXX, subject to available funding. The Government's estimated contribution, which is provided through the Contractor's contract with DOE, is $XX,XXX, subject to available funding.

ARTICLE IV: PERSONAL PROPERTY
There will be no jointly funded property. Personal property produced or acquired under this CRADA shall be disposed of as directed by the owner at the owner's expense.

ARTICLE V: 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.

ARTICLE VI: HOLD HARMLESS
Except for any liability resulting from any negligent acts or omissions of Contractor, Participant agrees to hold harmless the Government and the Contractor for all damages, costs and expenses, including attorneys' 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 VII: PROPRIETARY INFORMATION
Each Party agrees to not disclose Proprietary Information provided by the other Party to anyone other than the providing Party for a period of three (3) years from receipt of such Proprietary Information without the written approval of the providing Party, except to Government employees who are subject to 18 USC 1905, even after termination (see Article XIX).

ARTICLE VIII: OBLIGATIONS AS TO PROTECTED CRADA INFORMATION
Each Party may designate and mark as Protected CRADA Information any qualifying Generated Information produced by its employees. The Parties agree not to further disclose such Protected CRADA Information for a period of five (5) years from the date it is produced except for internal use.

ARTICLE IX: CESSATION OF OBLIGATIONS REGARDING PROTECTED AND PROPRIETARY INFORMATION
The obligations relating to the disclosure in Articles VII and VIII shall end: if any such information becomes inadvertently publicly known; or it is independently developed by another who did not have access to it under this CRADA.
ARTICLE X: RIGHTS IN DATA
The Parties and the Government shall have unlimited rights and each of them shall have the right to use all Generated Information produced or information provided to the Parties under this CRADA which is not marked as being Protected CRADA Information or Proprietary Information.

ARTICLE XI: 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 contracting officer and the DOE Office of Scientific and Technical Information. Use of the name of the other Party or its employees in any promotional activity, with reference to this CRADA, requires written approval (responses to customer survey forms and solicitations for success stories are considered written approval) of the other Party.

ARTICLE XII: RIGHTS TO SUBJECT INVENTIONS
A. Each Party shall have the first option to retain title to any Subject Inventions solely made by its employees during the work under this CRADA. The Parties agree to disclose to each other each and every Subject Invention, which may be patentable or otherwise protectable under the Patent Act. The Parties acknowledge that the Contractor and Participant will disclose Subject Inventions to the DOE 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. If a Party elects not to retain title to any such Subject Invention of its employees, then the other Party shall have the option of electing to retain title to such Subject Inventions under this CRADA.

B. 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 under this CRADA throughout the world.

C. 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.

D. The Participant has the option, for up to six (6) months after receipt of notice from the Contractor that the Contractor has elected title to any Contractor Subject Invention, to choose, for reasonable compensation, an exclusive license to Contractor’s Subject Invention(s) in the field of use of Field Of Use. The U.S. Competitiveness Article (Article XV) shall apply to all such license agreements.

ARTICLE XIII: REPORTS OF INTELLECTUAL PROPERTY USE
The Parties agree to submit, for a period of three (3) years 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.

ARTICLE XIV: DOE MARCH-IN RIGHTS
The Parties acknowledge that the DOE has certain march-in rights to any Subject Inventions in accordance with 48 CFR 27.304-l(g).
ARTICLE XV:  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 the benefits received under this CRADA, the Parties therefore agree 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 U.S., shall not result in reduction of the use of the same processes, services, or improvements in the United States.

ARTICLE XVI:  FORCE MAJEURE

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

ARTICLE XVII:  DISPUTES

The Parties will attempt to resolve any differences between them which may arise during the course of this CRADA. In the event that a dispute cannot be resolved between the Parties, the dispute may be resolved by a court of competent jurisdiction.

ARTICLE XVIII:  ENTIRE CRADA AND MODIFICATIONS

This document and its Appendices represent the entire agreement reached between the Parties in performing the research described in the Statement of Work (Appendix A) and shall not be effective until approved by DOE and both Parties. Any agreement to materially change any terms or conditions to either this CRADA or the Appendices shall be valid only if the change is made in writing, executed by the Parties hereto, and approved by DOE.

ARTICLE XIX:  TERMINATION

This CRADA may be terminated by either Party with thirty (30) days’ written notice to the other Party. Each Party will be responsible for its own costs as a result of this termination. The obligations of any article of this CRADA which were intended to survive the expiration of the period of performance, such as confidentiality, use and/or on-disclosure obligations, shall also survive any termination of this CRADA.
IN WITNESS WHEREOF, the Parties hereto have caused this CRADA to be duly executed in their respective names by their duly authorized representatives.

FOR CONTRACTOR:

By: ________________________________

Name: _______________ Michael J. Paulus _______________

Title: ___________ Director, Technology Transfer ___________

Date: ________________________________

FOR PARTICIPANT:

By: ________________________________

Name: _______________ _______________

Title: ___________ _______________

Date: ________________________________
Appendix A

Statement of Work

for

CRADA No. NFE-1X-0XXXX

with

Participant's Name

for

Title of Project

Purpose and Background

Scope of Work

Estimated Cost and Source of Support

The contributions by each Party are specified in CRADA Article III: TERM, FUNDING AND COSTS. The flow of funds is summarized below for each Project Year (PY), inclusive of any applicable Federal Administrative Charges (FAC)*.

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<th>PY 4</th>
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</table>

*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(s).

Deliverables

In addition to the minimum deliverables shown in Article XI of the CRADA, the following will be delivered: ???.

A-1
Schedule

Program Management
The principal investigators for this CRADA are ORNL Principal Investigator (Contractor) and Participant Principal Investigator (Participant).