Department of Energy
Washington, DC 20585

DATE: July 14, 2005

MEMORANDUM FOR: Robert Fisher, Chicago Operations Office
Emily Schneider, Oak Ridge Operations Office
Dickson Kehl, Albuquerque Operations Office

FROM: Paul A. Gottlieb
Assistant General Counsel for Technology Transfer and Intellectual Property

SUBJECT: MEMORANDUM OF UNDERSTANDING FOR NANOSCALE SCIENCE RESEARCH CENTERS AND CLASS WAIVER, W(C)-2005-001

The attached Memorandum of Understanding and Class Waiver for the Nanoscale Science Research Centers (NSRCs) have been signed and may now be implemented. The MOU describes a set of uniform operating principles to which the NSRCs and National Laboratories voluntarily agreed to be bound. The intent of the MOU is to further the Congressional mandate establishing the NSRCs as user facilities by promoting a consistent, uniform approach to the disposition of intellectual property rights across all NSRCs that will ensure that all users, including small businesses, are treated fairly and equitably. Compliance with the MOU will be a part of the periodic appraisal of the NSRCs by the Office of Basic Energy Sciences.

In addition to the MOU and Class Waiver, the NSRC Precompetitive User Agreement is also attached. The MOU sets forth guidelines for use of the NSRC Class Waiver and the Precompetitive User Agreement, and also discusses use of the Proprietary User Waiver, CRADAs, and other user agreements.

We expect to implement similar operating principles at other Office of Science-funded facilities. Therefore, if it is not overly burdensome, we would like all NSRCs to keep track of how many transactions take place, which type of agreements are used, and what type of organizations are using the facilities (e.g., small businesses, universities, other), and provide these data to the cognizant field offices every 12 months.

cc: Gary Drew, BSO
Patricia Dehmer, SC-22
Michael Long, NA-116

MEMORANDUM OF UNDERSTANDING

for Implementation of a Standardized Approach to User Agreements at the
U.S. Department of Energy's Nanoscale Science Research Centers

By and Among

The U.S. Department of Energy
Office of Basic Energy Sciences

and

The U.S. Department of Energy
National Nuclear Security Administration

and

The Center for Nanoscale Materials
at Argonne National Laboratory
as operated by the University of Chicago
under its U.S. Department of Energy Contract

and

The Center for Functional Nanomaterials
at Brookhaven National Laboratory
as operated by Brookhaven Science Associates, LLC
under its U.S. Department of Energy Contract

and

The Molecular Foundry
at Lawrence Berkeley National Laboratory
as operated by the Regents of the University of California
under its U.S. Department of Energy Contract

and

The Center for Integrated Nanotechnologies
at Los Alamos National Laboratory and Sandia National Laboratory
as operated by the Regents of the University of California and Sandia Corporation
under their U.S. Department of Energy Contracts

and
The Center for Nanophase Materials Sciences
at Oak Ridge National Laboratory
as operated by UT Battelle, LLC
under its U.S. Department of Energy Contract

and their respective Field or Site Office Managers

hereinafter referred to collectively as "the Parties"

ARTICLE I. BACKGROUND

A. The National Nanotechnology Program.

1. The 21st Century Nanotechnology Research and Development Act, 15 U.S.C. § 7501 *et seq.*, (the "Nanotechnology Act") was signed into law on December 3, 2003. This legislation codifies programs and activities supported by the National Nanotechnology Initiative (NNI), a multi-agency nanotechnology research and development program that includes DOE.

2. Nanotechnology is the creation and utilization of materials, devices, and systems through the control of matter at the nanometer scale, that is, at the level of atoms, molecules, and supramolecular structures. The essence of nanotechnology is the ability to work at these levels to generate larger structures with fundamentally new modes of organization. These nanostructures are the smallest human-made objects, and they exhibit novel physical, chemical, and biological properties. The goal of nanotechnology is to learn to exploit these properties and efficiently manufacture and use materials incorporating these nanostructures.

3. DOE has established five Nanoscale Science Research Centers (NSRCs) pursuant to the NNI, that are funded by the Office of Basic Energy Sciences. These NSRCs are housed at various National Laboratories, which are operated under contract by the Management and Operating Laboratory contractors.

4. The Nanotechnology Act provides for the establishment of a network of advanced technology user facilities and centers. 15 U.S.C. § 7501(b). An "advanced technology user facility" is defined as "a nanotechnology research development facility supported, in whole or in part, by Federal funds that is open to all United States researchers on a competitive, merit-reviewed basis." 15 U.S.C. § 7509(5). The NSRCs are user facilities under the Nanotechnology Act.

ARTICLE II. PURPOSE

A. The purpose of this MOU is to further the Congressional mandate establishing the NSRCs as user facilities by promoting a consistent, uniform approach to the disposition of intellectual property (IP) rights across all NSRCs that will ensure that all users, including small businesses, are treated fairly and equitably. DOE's intent is to maximize the number and diversity of users at the NSRCs. This MOU sets forth a voluntary agreement by the undersigned National Laboratory and NSRC Directors, the cognizant DOE field and site offices, the DOE Office of Basic Energy Sciences and the National Nuclear Security Administration to follow a set of operating principles and standardized agreements. The Laboratories are expected to have flexibility in the application of the principles and in the use of the standard agreements established pursuant to this MOU. Compliance with this MOU will be considered as part of the periodic appraisal of the NSRCs by the Office of Basic Energy Sciences.

B. This MOU does not provide legal authority establishing an authorized agreement format. Such authority is found elsewhere. For example, the User Facilities Class Waiver ("Non-

Proprietary User Waiver"), the Class Waiver for Proprietary Users of Energy Research Designated User Facilities ("Proprietary User Waiver"), the Deployment User Facility Waiver used by NNSA, the CRADA authority, DOE Order 483.1, and the Work for Others (WFO) authority, DOE Order 481.1, all provide legally authorized agreement formats.

In consideration of the foregoing, the Parties hereby agree to use the agreements as set forth in Article III below:

ARTICLE III. OPERATING PRINCIPLES AND STANDARDIZED AGREEMENTS

A. Class Waiver Proprietary Users of Energy Research Designated User Facilities ("Proprietary User Waiver")

1. When to Use. Proprietary users (*e.g.*, full-cost recovery users) that will not collaborate with NSRC personnel and will use equipment only may, at the Laboratory's discretion, be offered an agreement based on this waiver. Laboratory employees may provide technical assistance in operating the equipment, but such assistance will not rise to the level of scientific collaboration (*e.g.*, collaborating on the design or conduct of the research).

2. Summary of Agreement Provisions.

   a. Standardized agreements based on this waiver are already in place and in use.

   b. The user owns inventions it makes while using the equipment at the facility;

   c. Subject to "g." below, first produced data may, at the user's discretion, be treated as its proprietary data;

   d. The user has no special right to negotiate a license to any Laboratory inventions;

   e. The Government does not take a government-use license in the inventions;

   f. The Government does not retain march-in rights; and

   g. The Government has no rights in the user's data produced at the facility unless the user is a foreign entity, the data is incorporated in the facility, or the data is related to public health and safety.

B. Nanoscale Science Research Center Class Waiver (the "NSRC Waiver"), Pre-Competitive NSRC User Agreement.

1. When to Use.

   a. The attached Pre-Competitive NSRC User Agreement should be offered to

pre-competitive users who intend to work with NSRC personnel using equipment, scientifically collaborating with NSRC personnel on a project that may involve equipment use, or a combination of both scientific collaboration and equipment use.

b. A pre-competitive user

i. Will have a general scope of work in which the user's tasks and deliverables will be set forth in an appendix attached to the NSRC User Agreement. The Laboratory's scope of work will be consistent with its Field Task or Work Proposal, as applicable. The scope of work will be directed toward pre-competitive research that advances the state of the art in the user's area of interest, rather than toward producing a specific commercial end result (*e.g.*, a marketable product).

ii. Intends to publish its research results in the open scientific literature;

iii. Does not require the data protection available in a CRADA.

2. Summary of Agreement Provisions:

a. The attached Pre-Competitive NSRC User Agreement is based on this waiver. The terms are standardized for use at all NSRCs and will not be modified except as provided in the Agreement.

b. Inventions jointly made by the user and the Laboratory will be jointly owned;

c. The user may elect title to inventions it makes while using the facility. If the user chooses not to elect title, the Laboratory may elect title to such inventions;

d. The user has no special right to negotiate a license to Laboratory inventions;

e. The Government retains a royalty-free, nonexclusive license to each invention made under this agreement;

f. First-produced data will be made publicly available; and

g. The standardized form for the Pre-Competitive NSRC User Agreement may be updated periodically at the discretion of the DOE Assistant General Counsel for Technology Transfer and Intellectual Property with the concurrence of the Office of Science and the NNSA.

C. Users with Special Concerns. A CRADA or transaction based on another authority, (*e.g.*, Work for Others, NNSA's Technology Deployment Center User Facility Agreement

(TDC/UF), may be used for collaborative users whose arrangement to use the facility is primarily commercial in nature (*e.g.*, users who are providing full cost recovery or require data protection). A CRADA may be a conventional, negotiated agreement or a Short Form CRADA. Development of a Short Form CRADA is within the authority of individual field or site offices that wish to use this type of transaction. Under 15 U.S.C. § 3710a, individual field or site offices may waive the requirement for DOE approval of individual statements of work and CRADAs, after consultation with the Assistant General Counsel for Technology Transfer and Intellectual Property.

D. Users Under Government Agreement. For users already under a Federal government agreement, typically universities and small businesses funded directly by DOE or other government agencies or under an International Agreement, the Intellectual Property terms and conditions of their funding agreements or International Agreements will apply. The Parties may use existing authorities to develop a cross agreement if they wish to do so.

E. Flexibility. A user may begin work under one type of agreement and may change to another by mutual agreement of the Parties. For instance, a user may begin work under a Pre-competitive NSRC User Agreement and later move to a CRADA. Such changes will be consistent with this MOU and the particulars will be left to each Laboratory's discretion. For this reason, users should be made aware of all available types of agreements.

F. Delegation. At the discretion of the cognizant field or site office, authority to enter standardized Proprietary User Agreements, Pre-competitive NSRC User Agreements, or Short Form CRADAs without DOE approval of each transaction may be delegated to the Laboratory provided the Laboratory has an approved management plan. To the extent that an agreement has been subject to a peer-review process that has been approved by a DOE or other government agency program office, a second DOE review of is not necessary for any agreement discussed in this MOU.

G. Small Businesses. The Parties are committed to assuring fair and equitable treatment for small businesses.

H. Options for Users. Laboratories shall make widely known the availability of these agreements at their facility.

WHEREFORE, let it be known by all present and all who shall read this document that on this ____ day of _____, 2005, the Department of Energy and the National Laboratories do signify, with the signing of this MOU, their commitment to utilize the agreements attached hereto according to the operating principles set forth herein.

ON BEHALF OF THE DEPARTMENT OF ENERGY:

I, James F. Decker, Principal Deputy Director of the Office of Science, do hereby authorize the National Laboratories to use the attached agreements according to the operating principles set forth herein.

_____

James F. Decker
Principal Deputy Director, Office of Science

ON BEHALF OF THE NATIONAL NUCLEAR SECURITY ADMINISTRATION:

I, Jerald S. Paul, Principal Deputy Administrator for National Nuclear Security, do hereby authorize the National Laboratories to use the attached agreements according to the operating principles set forth herein.

_____

Jerald S. Paul
Principal Deputy Administrator for National Nuclear Security

ON BEHALF OF THE NATIONAL LABORATORIES, NSRCs, DOE FIELD OFFICES, AND DOE/NNSA SITE OFFICES:

We, the undersigned, as representatives of the Contracted Managers and Operators of the National Laboratories, do hereby agree to use the attached agreements according to the operating principles set forth herein.

_____

Eric D. Isaacs
Director, The Center for Nanoscale Materials

_____

Robert C. Wunderlich
Site Manager,
Argonne Site Office

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Robert Hwang
Director, The Center for Functional Nanomaterials

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Michael D. Holland
Site Manager
Brookhaven Site Office

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A. Paul Alivisatos
Director, The Molecular Foundry

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Aundra Richards, Director
Berkeley Site Office

_____

Jeffrey Wadsworth
Director, Oak Ridge National Laboratory, on behalf of The Center for Nanophase Materials Sciences

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George J. Malosh
Assistant Manager for Science
Oak Ridge Office

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Julia M. Phillips
Director, The Center for Integrated Nanotechnologies

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Edwin Wilmot, Manager
Los Alamos Site Office

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Patty Wagner, Manager
Sandia Site Office