MEMORANDUM OF UNDERSTANDING

between

UCHICAGO ARGONNE, LLC, OPERATOR OF ARGONNE NATIONAL LABORATORY

and

FACULTY OF NATURAL SCIENCES AND ENGINEERING, CHUNG-ANG UNIVERSITY

FOR COOPERATION CONCERNING RENEWABLE ENERGY, NANOSCALE AND MESOSCALE SCIENCES, AND ENVIRONMENTAL SCIENCE

UChicago Argonne, LLC, operator of Argonne National Laboratory (Argonne) under Prime Contract No. DE-AC02-06CH11357 with the U.S. Department of Energy, and the Faculty of Natural Science and Engineering, Chung-Ang University, Korea (CAU), collectively Argonne and CAU are herein the "Participants",

SHARING an interest in collaborating to cooperate in areas of renewable energy, nanoscale and mesoscale sciences, and environmental science,

HAVE REACHED THE FOLLOWING UNDERSTANDING:

I. OBJECTIVE

The Participants intend to work together to develop the mechanisms and processes in the areas of renewable energy, nanoscale and mesoscale sciences, and environmental science.

II. FORMS OF COOPERATION

Cooperation may include, but is not limited to:

- 1. Exchange of samples and materials subject to applicable government approvals and laws;
- 2. Exchange of published scientific and technical information, publications, and reports;
- 3. Exchange of scientists, engineers, and other specialists for participation in joint education and planning research projects. Each Participant is to abide by the health, safety, and environmental requirements of the host Participant when on an exchange assignment at the host Participant's facility.

III. POINTS OF CONTACT

Each Participant should designate one or more Lead Coordinators, to serve as its principal representative(s) for all activities conducted under this Memorandum of Understanding (MOU), including identifying areas of cooperation, coordinating cooperation between the Participants,

and identifying available resources (including funding) for potential collaborative activities under this MOU.

IV. GENERAL CONSIDERATIONS

- 1. This MOU does not create any legally binding obligations between the Participants.
- 2. The conduct of cooperative activities contemplated by this MOU is subject to the availability of funding, personnel, and other resources.
- 3. Each Participant should conduct the cooperation under this MOU in accordance with applicable laws and regulations to which it is subject, and international agreements to which its Government is party.
- 4. Each Participant is to be responsible for the costs it incurs in participating in cooperative activities under this MOU.

V. COMMENCEMENT, MODIFICATION AND DISCONTINUATION

- 1. Cooperative activities under this MOU may commence upon signature by the Participants and continue for a 5-year period unless discontinued in accordance with paragraph 2 of this Section.
- 2. The Participants may discontinue this MOU at any time in writing. A Participant that wishes to discontinue its participation in this MOU should endeavor to provide at least ninety (90) days written notice to the other Participant.
- 3. This MOU may be modified in writing by mutual consent of the Participants, and may be extended for additional periods.

Signed in duplicate.

For UChicago Argonne, LLC **Operator of Argonne National Laboratory:** For Faculty of Natural Sciences and **Engineering, Chung-Ang University:**

Peter Littlewood

Associate Laboratory Director

Physical Sciences and Engineering

Kyung-Hyun Yoon Vice-President

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