MEMORANDUM OF UNDERSTANDING

Between

ARGONNE NATIONAL LABORATORY

And

DAEGU GYEONGBUK INSTITUTE OF SCIENCE AND TECHNOLOGY

FOR COOPERATION IN SCIENCE

Argonne National Laboratory and Daegu Gyeongbuk Institutue of Science and Technology, collectively herein the "Participants",

SHARING an interest in collaborating in emerging materials, bio-convergence spin system (BiC Spin), information and computation science, and green energy (the "Areas of Interest"),

HAVE REACHED THE FOLLOWING UNDERSTANDING:

I. OBJECTIVE

The Participants intend to work together to develop the mechanisms and processes to promote research and academic exchange and cooperation in the Areas of Interest.

II. FORMS OF COOPERATION

Cooperation may include, but is not limited to:

- 1. Planning of potential projects in the Areas of Interest;
- 2. Exchange of published scientific and technical information, publications, and reports;
- 3. Exchange of samples and materials, subject to applicable government approvals and laws;
- 4. Exchange of scientists, engineers, and other specialists for participation in cooperative activities as described above. 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.
- 5. The conduct of collaborative research and development, including projects planned pursuant to Paragraph 1 of this Section, is to be undertaken under an appropriate written contract therefor.

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 by mutual consent. 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 Argonne National Laboratory

For Daegu Gyeongbuk Institute of

Science and Technology

Paul K. Keauns PAUL J. KEARNS, DIRECTOR

Place Chuart 1L USA

Date 2018.04.03

SANG HYUK SON, PRESIDENT

Place Pae

Date 2018.