PROJECT ARRANGEMENT
UNDER THE IMPLEMENTING ARRANGEMENT
BETWEEN
THE DEPARTMENT OF ENERGY OF THE UNITED STATES OF AMERICA
AND
THE MINISTRY OF EDUCATION, CULTURE, SPORTS, SCIENCE AND TECHNOLOGY OF JAPAN
CONCERNING COOPERATION IN RESEARCH AND DEVELOPMENT IN ENERGY AND RELATED FIELDS

CONCERNING QUANTUM BEAM SCIENCE AND TECHNOLOGY

The Department of Energy of the United States of America (DOE) and the Ministry of Education, Culture, Sports, Science and Technology of Japan (MEXT), hereinafter referred to collectively as the "Participants" and individually as a "Participant":

ACTING under Section 4 of the Implementing Arrangement Between the Department of Energy of the United States of America and the Ministry of Education, Culture, Sports, Science and Technology of Japan Concerning Cooperation in Research and Development in Energy and Related Fields of April 30, 2013 (hereinafter referred to as the "Implementing Arrangement"); and

DESIRING to establish a framework for cooperation between agencies in the United States and in Japan for the advancement of quantum beam science and technology in the Participants' countries,

Have decided as follows:

Section 1-Objective

1. The objective of this Project Arrangement is to facilitate scientific and technological exchanges that promote collaboration on research and development for projects involving quantum beam science and technology.

2. This Project Arrangement is under the Implementing Arrangement, which is, in turn, subject to and governed by the Agreement Between the Government of the United States

of America and the Government of Japan on Cooperation in Research and Development in Science and Technology signed on June 20, 1988, as amended and extended (hereinafter referred to as the "Agreement"). In the event of any conflict between the contents of the Agreement or the Implementing Arrangement on the one hand and the contents of this Project Arrangement on the other hand, the contents of the Agreement or the Implementing Arrangement will govern.

Section 2-Areas of Cooperation

Cooperation under this Project Arrangement supports the advancement of quantum beam science and technology.

Specific areas of cooperation may include the research and development of:

1. X-Ray Light Sources;
2. Upgrade of quantum beam facilities, accelerators and beamlines;
3. Technologies and instrumentation relevant for advanced applications of quantum beams; and
4. Other related activities which may be mutually decided upon by the Participants in writing.

Section 3-Participating Organizations

Each Participant may invite other government agencies and organizations and private organizations in its country to participate in cooperative activities under this Project Arrangement, at the participating organizations' own expense and in accordance with such terms and conditions as the Participants may specify. For DOE, such participating organizations include DOE national laboratories, universities and other DOE-funded institutions. For MEXT, such participating organizations include Japanese national laboratories, universities and other MEXT-funded institutions.

Section 4-Forms of Cooperation

Cooperative activities under this Project Arrangement may include, but are not limited to, the following:

1. Exchange of Personnel: scientists, engineers, post-graduate and graduate students on

short-term or long-term basis under Section 6 of the Implementing Arrangement.

2. Exchange and provision of samples, materials, instruments, components, and software for experiments, testing, manufacturing, and evaluation.

3. Equipment Transfer: under section 7 of the Implementing Arrangement. Unless described otherwise in writing, any equipment made available by one Participant to the other Participant for the purpose of the collaboration will remain the property of the sending Participant.

4. Development and Exchange of Technical Information and Experiences, and Collaborative Visits: The Participants will jointly or independently develop research results in the areas listed in Section 2. Data and experience developed by the Participants under this Project Arrangement will be exchanged. The Participants will arrange collaborative visits related to research and development programs for this purpose.

Section 5-Management

1. Each Participant should designate a General Coordinator to facilitate the implementation and coordination of cooperative activities under this Project Arrangement.

2. The General Coordinators may, at their discretion, invite appropriate technical staff for each specific area of cooperation listed in Section 2 to attend meetings and to serve in an advisory capacity.

3. Each General Coordinator will be responsible for the following:
   (a) To maintain liaison with their counterpart; and
   (b) To plan, coordinate and monitor progress of cooperative activities under this Project Arrangement.

4. The General Coordinators should meet annually or as required on such dates and at such locations as are mutually decided.

Section 6-Commencement, Modification, and Discontinuation

1. Cooperative activities under this Project Arrangement may commence upon signature

and, unless discontinued under the procedures described in paragraph 3 of this Section, may continue so long as the Implementing Arrangement remains in operation.

2. This Project Arrangement may be modified by mutual written consent of the Participants, so long as the Implementing Arrangement remains in operation.

3. Cooperative activities under this Project Arrangement may be discontinued at any time by the Participants' mutual consent in writing, or at the discretion of either Participant, which should provide at least 6 months advance notification in writing to the other Participant.

Signed at Tokyo this 7th day of August 2019 in two originals.

FOR THE DEPARTMENT OF ENERGY OF THE UNITED STATES OF AMERICA:

Christopher Fall
Director, Office of Science

FOR THE MINISTRY OF EDUCATION CULTURE, SPORTS, SCIENCE AND TECHNOLOGY OF JAPAN:

Yutaka Hishiyama
Director General,
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