

**AGREEMENT  
BETWEEN  
THE JAPAN ATOMIC ENERGY AGENCY  
AND  
THE DEPARTMENT OF ENERGY OF THE UNITED STATES OF AMERICA  
FOR  
COOPERATION IN RESEARCH AND DEVELOPMENT IN  
NUCLEAR SCIENCE AND ENERGY**

The Japan Atomic Energy Agency (JAEA) and the Department of Energy of the United States of America (DOE), hereinafter collectively called the “Parties”,

Noting that the JAEA is the successor to both the Japan Nuclear Cycle Development Institute and the Japan Atomic Energy Research Institute;

Noting further

the Agreement between the Department of Energy of the United States of America and the Japan Nuclear Cycle Development Institute in the Field of Radioactive Waste Management signed March 19, 2003 (hereinafter the “2003 Agreement”),

the Agreement between the Department of Energy of the United States of America and the Japan Nuclear Cycle Development Institute in the Field of Nuclear Technologies signed August 22, 2000, and

the Agreement between the Department of Energy of the United States of America and the Japan Atomic Energy Research Institute in the Field of Nuclear Research and Development signed July 17, 1995, and

Wishing to continue the long-term and productive cooperation among DOE and JAEA’s predecessors in energy-related areas,

Hereby agree as follows:

**Article 1  
Objective**

- 1.1 Cooperation between the Parties shall be aimed at advancing progress towards a more secure and efficient energy future, a cleaner global environment and improved scientific knowledge and tools to achieve advances in nuclear science and energy research and development for peaceful purposes. Cooperation under this Agreement may include research; development; testing and evaluation of technology, equipment, and procedures; and exchange of information in order to advance these nuclear science and energy objectives.

- 1.2 Cooperation between the Parties shall be on the basis of mutual benefit, equality, and reciprocity.

## **Article 2**

### **Areas of Cooperation**

The areas of cooperation under this Agreement may encompass, but are not limited to:

- (i) Advanced nuclear technology;
- (ii) Quantum beam technology;
- (iii) Radioactive waste management;
- (iv) Fusion energy research;
- (v) **Other areas of nuclear science** and energy-related research and development as may be mutually agreed in writing by the Parties.

## **Article 3**

### **Methods of Cooperation**

- 3.1 Cooperation in accordance with this Agreement may include, but is not limited to, the following:
- 3.1.1 Exchange of scientists, engineers and other specialists, including those from industry and other non-government sectors for participation in energy-related research, development, analysis, design and experimental activities conducted in research centers, laboratories, engineering offices, and other facilities and enterprises of the Parties or their designated representatives;
  - 3.1.2 Exchange or loan of samples, materials, instruments and components for testing;
  - 3.1.3. Exchange of unclassified scientific and technical information, including results and methods of research and development;
  - 3.1.4 Joint research activities in which the Parties agree to share the work and/or costs. Each such joint research activity shall be the subject of a written Project Annex as described in Article 4;
  - 3.1.5 Organization of seminars, workshops, and other meetings on agreed topics;
  - 3.1.6 Visits by a Party's specialist teams or individuals to the facilities of the other Party;

- 3.1.7 The use by one Party of the facilities owned or operated by the other Party. Such use of facilities shall be the subject of a separate written agreement between the Parties.
- 3.2 Other specific forms of cooperation may be added by agreement of the Parties.

#### **Article 4**

##### **Project Annexes**

Cooperative activities under this Agreement may be undertaken by the Parties or, as appropriate, laboratories or contractors of the Parties. The Parties may designate non-governmental scientific and technological research institutions within their respective countries to carry out the joint projects. Each cooperative activity that may involve the sharing of costs or that may give rise to intellectual property shall be described in writing in a Project Annex, which shall be subject to approval by the Permanent Coordinating Group (as provided for in Article 5). Such Project Annexes shall include detailed provisions for carrying out the specified forms of cooperation, including such matters as technical scope, exchange of business-confidential information, management, total costs, cost sharing and schedule. Each Project Annex shall be subject to and shall refer to this Agreement.

#### **Article 5**

##### **Management**

- 5.1 The Parties hereby establish a Permanent Coordinating Group (PCG) to supervise the implementation of this Agreement. Decisions of the PCG shall be made by consensus of the Parties.
- 5.2 Each Party shall designate a Principal Coordinator to supervise the implementation of this Agreement. Technical management of the cooperation shall be carried out by project leaders designated by the Principal Coordinators. Project leaders shall be responsible for the working contacts between the Parties in their respective areas of cooperation. The Principal Coordinators shall agree on specific details of cooperation in the technical areas listed in Article 2 of this Agreement, within policy guidelines established by the PCG.
- 5.3 The PCG shall meet once each year, alternately in the United States and in Japan, or at such other times and places as agreed. At its meetings, the PCG shall evaluate the status of cooperation under this Agreement. This evaluation shall include a review of the past year's activities and accomplishments and of the activities planned for the coming year, an assessment of the balances of exchanges within each technical field or group of related technical fields listed in Article 2, and consideration of measures designed to ensure that such exchanges are mutually beneficial to the Parties. In addition, the PCG shall consider and act on any major new proposals for collaboration. Principal Coordinators and other

advisers to the Parties may, at the discretion of the PCG, participate in these annual meetings.

## **Article 6**

### **Exchange of Personnel**

The following provisions shall apply concerning exchanges of personnel under this Agreement:

- 6.1 Whenever an exchange of personnel is contemplated, each Party shall endeavor to ensure the selection of qualified personnel with skills and competence necessary to conduct the activities planned under this Agreement. Each such exchange of personnel shall be agreed in advance by an exchange of letters between the Parties, referencing this Agreement and its pertinent intellectual property provisions.
- 6.2 Each Party shall be responsible for the salaries, insurance, and allowances to be paid to its staff or its contractors.
- 6.3 Each Party shall pay for the travel and living expenses of its staff or its contractors while on assignment to the host Party, unless otherwise agreed in writing.
- 6.4 The host Party shall help locate adequate accommodations for the other Party's staff or contractors and their families on a mutually agreeable reciprocal basis.
- 6.5 Each Party shall provide all necessary assistance to the assigned staff of the other Party or its contractors and their families as regards administrative formalities, such as assistance in making travel arrangements.
- 6.6 The staff and contractors of each Party shall conform to the general and specific rules of work and safety regulations in force at the host establishment.

## **Article 7**

### **Exchange of Equipment**

By mutual agreement, a Party may provide equipment to be utilized in a joint activity. In that event, the following provisions shall apply:

- 7.1 The sending Party shall supply, as early as possible, a detailed list of the equipment to be provided, together with the relevant specifications and appropriate technical and informational documentation related to use, maintenance, and repair of the equipment.

Title to the equipment and necessary spare parts supplied by the sending Party for use in joint activities shall remain with the sending Party, and the equipment shall be returned to the sending Party upon completion of the joint activity, unless otherwise agreed.

- 7.3 Equipment provided pursuant to this Agreement shall be brought into operation at the host establishment only by agreement of the Parties.
- 7.4 The host establishment shall provide the necessary premises and shelter for the equipment; utilities such as electric power, water and gas; and normally, shall provide materials to be tested, in accordance with all technical requirements, which shall be as mutually agreed upon.
- 7.5 Responsibility for expenses, safekeeping, and insurance during the transport of equipment from the original location in the country of the sending Party to the place of entry in the country of the receiving Party shall rest with the sending Party. If the sending Party elects to have the equipment returned, it shall be responsible for expenses, safekeeping, and insurance during the transport of the equipment from the original point of entry in the country of the receiving Party to the final destination in the country of the sending Party.
- 7.6 Responsibility for expenses, safekeeping, and insurance during the transport of equipment from the place of entry in the country of the receiving Party to the final destination in the country of the receiving Party shall rest with the receiving Party. If the sending Party elects to have the equipment returned, the receiving Party shall be responsible for expenses, safekeeping, and insurance during the transport of the equipment from the final destination in the country of the receiving Party to the original point of entry in the country of the receiving Party.
- 7.7 Responsibility for expenses, safekeeping, and insurance during the time period that the equipment is in use in the country of the receiving Party shall rest with the receiving Party unless otherwise agreed in writing.
- 7.8 Equipment provided pursuant to this Agreement for use in joint activities shall be considered to be scientific, not having a commercial character, and each Party shall make its best effort to obtain duty free entry.

## **Article 8**

### **Samples and Materials**

Unless otherwise agreed in writing, the following provisions shall apply to the transportation and use of samples and materials provided by one Party to the other Party under this Agreement:

- 8.1 All samples and materials provided by the sending Party to the receiving Party shall remain the property of the sending Party, and shall be returned to the sending Party on request.

Where one Party requests that the other Party provide a sample or material, the Party making the request shall bear all costs and expenses associated with the transportation of the sample or material from the location of the sending Party to its final destination.

- 8.3 Each Party shall promptly disclose to the other Party all information arising from the examination or testing of samples or materials exchanged under this Agreement. The Parties agree that business-confidential information (as defined in Section III of the Intellectual Property Rights Annex attached to this Agreement), which was developed prior to or outside the scope of this Agreement, shall remain business-confidential even though it is contained in the results of an examination or testing of samples or materials. Such information shall be identified as business-confidential by the Party asserting its business-confidential nature as soon as possible after disclosure of all information arising from the examination or testing is made to such Party and the other Party shall be immediately advised of that identification. All information identified as business-confidential shall be controlled as provided in Section III of the Intellectual Property Rights Annex.
- 8.4 A Party providing samples or materials to the other Party may also provide a partial or complete list of the types of information that may result from the examination or testing of such samples or materials and which are to be treated as business-confidential as defined in Section III of the Intellectual Property Rights Annex. All such business-confidential information is to be controlled as set out in Section III of that Annex.

## **Article 9**

### **Transfer of Information and Equipment**

- 9.1 The Parties may exchange, as agreed on a mutually beneficial basis, scientific and technical information, documents, and results of research and development of work carried out under this Agreement. Such information shall be limited to that which the Parties have the right to disclose, either in their possession or available to them, relating to the areas of cooperation described in Article 2.
- 9.2 Seminar proceedings and reports of joint activities carried out under this Agreement shall be published as joint publications, as agreed by the Parties.
- 9.3 The Parties agree that information developed and exchanged under this Agreement should be given wide distribution. Except as provided in Section III of the Intellectual Property Rights Annex to this Agreement, such information may be made available to the public by either Party through customary channels and in accordance with normal procedures of the Parties.

**Article 10**  
**Intellectual Property; Business-Confidential Information**

The protection and allocation of intellectual property and the treatment of business-confidential information created or furnished in the course of cooperative activities under this Agreement shall be governed exclusively by the provisions of the Intellectual Property Rights Annex, which constitutes an integral part of this Agreement.

**Article 11**  
**General Provisions**

- 11.1 Unless otherwise agreed in writing, all costs resulting from cooperation pursuant to this Agreement shall be the responsibility of the Party that incurs them.
- 11.2 The conduct of the activities provided for in this Agreement is subject to the availability of appropriated funds, personnel, and other resources.
- 11.3 Each Party shall conduct the activities provided for in this Agreement in accordance with the laws and regulations of its respective country.
- 11.4 Any dispute concerning the interpretation or application of this Agreement shall be settled by consultations between the Parties.
- 11.5 All information or equipment transmitted by one Party to the other Party under this Agreement and any related Project Annex shall be appropriate and accurate to the best knowledge and belief of the transmitting Party, but the transmitting Party does not warrant the suitability of the information or equipment transmitted for any particular use or application by the receiving Party or any third party. Information or equipment developed jointly by the Parties shall be appropriate and accurate to the best knowledge and belief of both Parties. Neither Party warrants the accuracy of the jointly developed information or the appropriateness of equipment, nor its suitability for any particular use or application by either Party or by any third party.
- 11.6 This Agreement supersedes the 2003 Agreement.

**Article 12**  
**Duration, Amendment and Termination**

- 12.1 This Agreement shall enter into force upon signature by the Parties. Subject to Article 12.3, it shall remain in force for 5 years, and be automatically renewed for further 5-year periods unless either Party notifies the other in writing three months prior to the expiration of the first 5-year period or a succeeding 5-year period of its intent to terminate the Agreement.

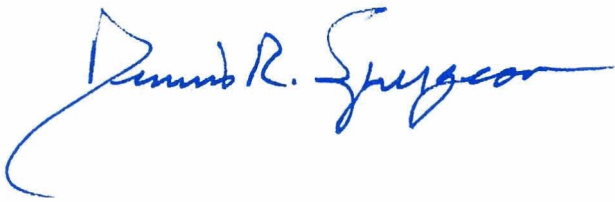
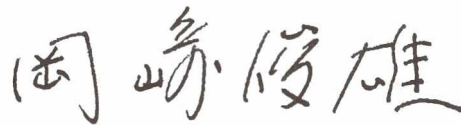
12.2 This Agreement may be amended by written agreement of the Parties.

12.3 This Agreement may be terminated at any time at the discretion of either Party upon three months written notice to the other Party. All ongoing joint activities, projects and experiments not completed at the expiration or termination of this Agreement may be continued until their completion under the terms of this Agreement.

DONE at Washington this fourth day of April, 2007, in duplicate.

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

FOR THE JAPAN ATOMIC ENERGY  
AGENCY:

A handwritten signature in blue ink, reading "Dennis R. Spurgeon". The signature is fluid and cursive, with a long horizontal stroke at the end.A handwritten signature in black ink, reading "岡崎俊雄" (Okazaki Shun'yu). The signature is written in a stylized, cursive Japanese calligraphic style.



## **Annex on Intellectual Property Rights**

Pursuant to Article 10 of this Agreement:

The Parties shall ensure adequate and effective protection of intellectual property created or furnished under this Agreement and relevant Project Annexes. The Parties agree to notify one another in a timely fashion of any inventions or copyrighted works arising under this Agreement and to seek protection for such intellectual property in a timely fashion. Rights to such intellectual property shall be allocated as provided in this Annex.

### **I. Scope**

- A. This Annex is applicable to all cooperative activities undertaken by the Parties or by the relevant entities (hereafter “cooperative entities”) pursuant to this Agreement, except as otherwise specifically agreed by the Parties or their cooperative entities.
- B. For purposes of this Agreement, “intellectual property” shall have the meaning found in Article 2 of the Convention Establishing the World Intellectual Property Organization, done at Stockholm, July 14, 1967.
- C. This Annex addresses the allocation of rights, interests and royalties between the Parties. Each Party shall ensure that the other Party can obtain the rights to intellectual property allocated in accordance with this Annex. The allocation between a Party and participants on behalf of this Party in cooperative activities, which shall be determined by the laws and practices of the Party’s country, shall not be altered or prejudiced by application of this Annex.
- D. Disputes concerning intellectual property arising under this Agreement should be resolved through discussions between the concerned participating institutions, or, if necessary, the Parties or their designees. Upon mutual agreement of the Parties, a dispute shall be submitted to an arbitral tribunal for binding arbitration in accordance with the applicable rules of international law. Unless the Parties or their designees agree otherwise in writing, the arbitration rules of UNCITRAL shall govern.
- E. Termination or expiration of this Agreement shall not affect the rights or obligations under this Annex.

### **II. Allocation of Rights**

- A. Each Party, subject to the restrictions of Article III. of this Annex, shall be entitled to a non-exclusive, irrevocable, royalty-free license in all countries to translate, reproduce, and publicly distribute scientific and technical journal articles, and publicly available reports and books directly arising from cooperation under this Agreement. All publicly distributed copies of a copyrighted work prepared under this provision shall indicate

the names of the authors of the work unless an author explicitly declines to be named. Each Party or its cooperative entities shall have the right to review a translation prior to public distribution.

B. Rights to all forms of intellectual property, other than those rights described in paragraph II.A, above, shall be allocated as follows:

(1) Visiting researchers, for example, scientists visiting primarily in furtherance of their education, shall receive intellectual property rights under the policies of the host institution, unless a specific agreement is or has been signed between the host and forwarding institutions. In addition, each visiting researcher named as an inventor shall be entitled to treatment as a national of the host country with regard to awards, bonuses, benefits, or any other rewards in accordance with the policies of the host institution.

(2) (a) For intellectual property created during joint research, the Parties or their cooperative entities shall jointly develop a technology management plan either prior to the start of their cooperation, for example, in research areas likely to lead rapidly to industrial applications, or within a reasonable time from the time a Party becomes aware of the creation of intellectual property. The technology management plan shall consider the relative contributions of the Parties and their cooperative entities, the benefits of exclusive or non-exclusive licensing by territory or for field of use, requirements imposed by the domestic laws of the Parties' countries, and other factors deemed appropriate. If needed, the technology management plan shall be jointly modified or completed in a timely fashion, subject to the approval of both Parties or their cooperative entities.

(b) If the Parties or their cooperative entities cannot reach agreement on a joint technology management plan within a reasonable time not to exceed six months from the time a Party becomes aware of the creation of the intellectual property in question, each Party may designate one co-exclusive licensee to have world-wide rights to said intellectual property. Each Party shall notify the other two months prior to making a designation under this paragraph. When both Parties (or their licensees) exploit the intellectual property in a country, they shall share equally the reasonable cost of intellectual property protection in that country.

(c) A specific program of research will be regarded as joint research for purposes of allocating rights to intellectual property only when it is designated as such in the relevant Project Annex. Otherwise, the allocation of rights to intellectual property will be in accordance with paragraph II-B/1.

(d) In the event that either Party believes that a particular joint research project under this Agreement will lead, or has led, to the creation or furnishing of intellectual property of a type not protected by the applicable laws of one of the Parties' countries, the Parties shall immediately hold discussions to determine the allocation of rights to the said intellectual property; the joint activities in question will be suspended during the discussions, unless otherwise agreed by the Parties thereto. If no agreement can be reached within a three month period from the date of the request for discussions, the Parties shall cease the cooperation in the project in question. Notwithstanding paragraphs II-B/2(a) and (b), rights to any intellectual property which has been created will be resolved in accordance with the provisions of Article I-D.

### III. Business-Confidential Information

In the event that information identified in a timely fashion as business-confidential is furnished or created under this Agreement, each Party and its cooperative entities shall protect such information in accordance with applicable laws, regulations, and administrative practices. Information may be identified as "business-confidential" if a person having the information may derive an economic benefit from it or may obtain a competitive advantage over those who do not have it, the information is not generally known or publicly available from other sources, and the owner has not previously made the information available without imposing in a timely manner an obligation to keep it confidential.

Without prior written consent, neither of the Parties shall disclose any business-confidential information provided by the other Party except to appropriate employees and government personnel. If expressly agreed between the Parties, business-confidential information may be disclosed to prime and subcontractors. Such disclosure shall be for use only within the scope of their contracts with the Parties relating to cooperation under the Agreement. The Parties shall impose, or shall have imposed, an obligation on those receiving such information to keep it confidential. If one of the Parties becomes aware that, under the laws or regulations of its country, it will be, or may reasonably be expected to become, unable to meet the non-disclosure provisions, it shall immediately inform the other Party. The Parties shall thereafter consult to define an appropriate course of action.