



## *Message from the President*

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*President, JAEA, Toshio KODAMA*

We sincerely thank you for your understanding and continuous support for the research and development (R&D) activities of the Japan Atomic Energy Agency (JAEA).

As Japan's sole comprehensive nuclear R&D institution, the mission of the JAEA is to contribute to the welfare and prosperity of human society through nuclear science and technology (S&T). Since last year, the JAEA has been working toward this mission, while prioritizing safety, taking measures against COVID-19, and adopting novel ways of working, such as telecommuting.

In response to the accident at the Fukushima Daiichi Nuclear Power Station, we are working on the R&D of both decommissioning and environmental recovery, such as the preparation for the analysis of fuel debris. In the field of nuclear safety research and emergency preparedness—in addition to technical support for the nuclear safety regulatory administration (e.g., evaluation of nuclear safety)—we are engaged in research on advanced nuclear safety and emergency preparedness. In the development of fast reactors and advanced reactors, we are working on technical issues related to fast reactor development in accordance with the national strategic roadmap. Further, we are undertaking R&D on high-temperature gas-cooled reactor technology, which is expected to contribute to carbon neutrality by 2050. Furthermore, we are proceeding with R&D on the nuclear fuel cycle, as well as radioactive waste treatment and disposal technology. In the area of decommissioning, the decommissioning of Monju, Fugen, and Tokai Reprocessing Plants, is proceeding on the basis of the “Backend Roadmap”. As for basic and fundamental research in the nuclear field, we are advancing efforts aimed at creating new applications of atomic energy, developing unexplored research fields, and promoting academic progress and cutting-edge S&T. In May 2021, we started operation of the “Open Facility Platform”. This provides related information and accepts applications with the aim of improving researchers' usability of large-scale service facilities and equipment provided by the JAEA. Further, in February 2021, we resumed in-service operation of the research reactor JRR-3. We are working to establish a system for further cooperation and collaboration with industry, academia, and government.

In the Future Vision “JAEA 2050+”, JAEA intends to achieve a “New Era Nuclear S&T” that facilitates the resolution of global climate change, securing energy supply, and achieving the ideal future society (Society 5.0). This will be attained through the promotion of synergies between the nuclear energy field and other fields. Based on the “Innovation Creation Strategy”—revised in November 2020—we will promote our contribution to social change through open innovation initiatives via synergies with various fields.

In this publication, we introduce the latest R&D results obtained from studies undertaken by the JAEA. We hope this publication will further your understanding of our R&D activities.

We would appreciate your continued encouragement and support.