

Congratulatory address

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First of all, I would like to offer my congratulations on the 30th anniversary of the Advanced Science Research Center, Japan Atomic Energy Agency. Since 2015, I have been committed to ASRC as an evaluation committee member. I would like to thank the ASRC people including Dr. Koki Takanashi, the Director General of ASRC, for inviting me to the ceremony for the 30th anniversary. I cannot attend in person, unfortunately, but I am happy to deliver this video message for all of you.

The Max-Planck Society is Germany's most successful research organization. With 31 Noble laureates among the ranks of its scientists, it is on equal footing with the best and most prestigious research institutions world-wide. The more than 15,000 publications each year in internationally renowned scientific journals are proof of the outstanding research work conducted at Max Planck. Max-Planck Institutes are built around world-leading researchers. They themselves define their research subjects and are given the best working conditions. The currently 85 Max-Planck Institutes and facilities conduct basic research in the service of the general public in natural science, life science, social science, and humanities.

JAEA is the unique organization charged with implementing Japanese nuclear policy as a national research institute. Recently, based on the shift of the major national policy, JAEA has set forth a new vision: "Explore the new future with the synergy of nuclear and renewables". The ASRC was established in 1993, 30 years ago, with the aim of solving the problems of nuclear research and development by going back to the origin of the principles and phenomena, and advancing research that leads the development of not only nuclear energy, but also other fields through collaboration with basic science.

The mission of JAEA is to make research and developments that cover from basic science to practical applications of atomic energy, leading to industrial innovation. In this sense, the presence of ASRC focusing on fundamental research is a strength of JAEA and I believe that the importance of ASRC has never changed, still now after 30 years.

ASRC has been exploring the frontiers of both nuclear and material science. As an ASRC evaluation committee member since 2015 I have found a lot of scientific achievements produced in ASRC. I am a material scientist, particularly interested in spintronics and topological phenomena. I would like to say that ASRC is really the pioneer of spin mechatronics. The study of the coupling between the spin current and mechanical motion is very unique, without peer in the world. Recently, in addition, the tolerance of the spin Seebeck thermoelectricity against irradiation has been investigated, which will contribute to the re-use of nuclear waste as an atomic battery. Striking results have also been reported in the study of actinides and their compounds, including topological superconductivity in uranium ditelluride, through the use of special facilities of JAEA. These are only a few examples among a lot of significant achievements in the ASRC.

Another advantage, characteristic of ASRC, is a remarkable adaptability for organizational structure. According to the changing times, the composition of the research groups has been adjusted to effectively address current changes. I have strong confidence in the potential of ASRC for continued success under the excellent leadership of the Director General.

Congratulations again. I look forward to further collaboration with the ASRC. Thank you for your attention.