

Se-Jun Yoon
Ministry of Science and Technology
Korea

Ladies and Gentlemen

It is my great pleasure to make the opening remarks on this 7th Information Exchange Meeting on Partitioning and Transmutation.

The world's population is expanding most rapidly. It is 60 billion now, but is expected to reach 10 billion by the year of 2050. As the population grows, so will the demand for energy and resources. Simply supplying energy will, however, have adverse environmental impacts and potential long-term damage to the global climate alteration. We need to supply the energy that is clean; safe, and cost-effective.

People in nuclear industry believe that the nuclear energy is what we will have to rely on for the future, and I also am a firm believer of this. The public reality, however, is somewhat different from what we give credit to. I think that the difference comes from the anxiety about safety, especially problems concerning the nuclear waste.

Intensive R&D has been performed to improve the safety since the beginning of nuclear era. The technical solutions for the safety problem are expected to be within acceptable range in near future, although it may not be in terms of mass psychology. A deep geologic repository is suggested as a solution to the nuclear waste management. This requires isolation of that site for thousands of years. It is not easy for the public to accept the idea of "permanent isolation".

R&D on various technologies is being performed to provide a better solution to the waste issues, around the world. In this regard, I believe Partitioning and Transmutation combined with a deep geologic repository is promising technologies. However, Partitioning and Transmutation technology still has a long way to go. Much more R&D on Partitioning has to be done to separate the long-lasting radioactive nuclide with acceptable recovery rate and non-proliferation requirements.

In this regard, we also are much concerned about pyroprocessing technology in connection with Generation IV development. I believe this technology will allow us to reduce the amount of nuclear waste.

Ladies and Gentlemen,

We are all here together this morning, some of us from the reactor field, some from the fuel process field, and some from the materials field. Nevertheless, we all have the same objective, seeking solutions for the nuclear waste problem. We will discuss and share different views on the fuel cycle strategies, partitioning process, fuel and materials, and transmutation reactors for next three days.

Jeju is a very popular place for honeymoon in Korea. A lot of couples begin their second life in Jeju. I hope our work for the next few days will help build a new basis for the bright future of nuclear energy.

In closing, I would like to express my deep appreciation again for your participation in this 7th information exchange meeting in Jeju, and I hope your stay would be a most enjoyable and valuable one.

Thank you very much.