## SAMRAI2014

## **Conclusion and Recommendations**

SAMRAI2014 was held on March 24 2015 as the First Scientific Advisory Meeting for Radiation and Accurate Information in the First Diet Member's Hall of the House of Representatives, Tokyo, Japan on December 3, 2014 focusing on the main theme, "Scientific understanding of low dose-rate radiation in Fukushima and the issue of rehabilitation in the 20 km zone". With the participation of general public, scientists, engineers, and politicians, five leading experts of radiation science from Japan, the United States, and the United Kingdom presented reports with the following themes:

- 1. Summary of low dose-rate radiation exposures from the Fukushima light-water reactor accident and the latest scientific data for the 20 km zone;
- 2. Comparison with the Chernobyl graphite reactor accident that resulted in much higher radiation exposures;
- 3. Understanding the biological effects of low dose-rate radiation;
- Pointing out the application of unscientific linear-no-threshold (LNT) model for extrapolating radiation risk to low dose ranges;
- · Beneficial effects of low dose-rate radiation on human health (health enhancement effects);
- 4. Unscientific nature of extreme political actions with regard to low-dose radiation by the Japanese Government based on the concerns by advisory bodies, although low doses of radiation are harmless;
- 5. Measures for the education of society to overcome the great hardships imposed on the society by these actions and misunderstandings;
- 6. Historical record of safety of nuclear energy in comparison to other sources of energy; and
- 7. Methods of avoiding the type of disastrous consequences following Fukushima Daiichi nuclear power plant accidents by taking steps to prevent such accidents and modifying evacuation policies based on scientific knowledge.

During this scientific meeting, it was confirmed that the low dose-rate radiation in Fukushima poses no health risk for the public and that a delay of the rehabilitation in the 20 km zone and the confusion in the society originates from the erroneous information regarding radiation that has been spread, not only in Japan and its governmental organizations, but worldwide by intergovernmental organizations.

The scientific reports have been summarized in the extended two-page abstracts of SAMRAI2014. The proceedings containing the full papers will be published in Spring 2015 both in Japanese and English. Furthermore, simultaneously with the meeting, a book entitled "Risk of No Radiation – Overcoming the world crisis caused by the LNT Model", jointly authored by three scientists, has been published.

The five scientists who reported in SAMRAI2014 make the following seven recommendations to the Japanese Government for providing the correct knowledge of radiation to Japan and the world and for ending the confusion in the society:

- 1. The Japanese Government should intensify efforts to publicize the fact that Fukushima population has been exposed to low dose-rate radiation and the scientific understanding that there is no health risk to the people, both in and outside the country;
- Conditions should be created to facilitate scientific presentations which provide correct radiation information
  and personal understanding to all people, particularly those who are under forced evacuation in Fukushima
  Prefecture;
- 3. The standards imposed by political decision for radioactivity in foods should be restored to the previous standards based on the guidelines by the former Nuclear Safety Commission in Japan;
- 4. Scientists and/or radiation safety professionals should be permitted to make realistic assessments of the radiation doses that would be received by the returning residents within the 20 km zone in Fukushima, by staying in their homes and living like the residents while wearing personal dosimeters;
- 5. To correct the situation handled as a black box in the 20 km zone of the Fukushima Daiichi NPP, the Government should recognize and support the active attempts towards return of the population including an ongoing private project for the breeding test of Japanese cattle in Namie Town; and
- 6. Expedited recovery of the infrastructure destroyed by the earthquake and subsequent tsunami in the 20 km zone of the Fukushima Daiichi NPP should be initiated to prepare the area for the return of the population.
- 7. Nuclear power plants in Japan should resume operations as soon as possible after recommended modifications have been completed.

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## Note:

- 1. SAMRAI: The Scientists Advisory Meeting for Radiation Accurate Information
- 2. SAMRAI2014 had been prepared originally to be held on December 3, 2014. However, because it was supposed that the general election would be hastily implemented, the meeting had been postponed to next year held.