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Japanese, US Scientists Discuss Radiobiology

The first Japan-United States conference on the effect and uses of radioactive substances opened Monday at the Science Council of Japan building at Ueno, Tokyo, to talk over various facets of the complicated problems arising from the recent series of thermonuclear bomb explosions.

The first day session of the five-day conference was devoted largely to the debates on the general principles governing the maximal extent of radiation safe to the human body and its environment and also on the practical application of these principles in determining safety level of radioactivity under various situations.

Dwelling on the concepts of the limits of permissible doses now commonly accepted in the United States, Dr. Walter D. Claus, a reputed authority on radiation tolerance, said that certain criteria are shown in the U.S. National Bureau of Standards Handbooks Nos. 52 and 59.

He said, however, that these standards are not necessarily inflexible. For instance, he said, they vary, depending on whether a person is exposed to radiation while at work day in and day out, or whether he is accidentally or abruptly exposed during his lifetime.

It was reported that a person may safely receive in one dose 80 times as much radiation as he could receive in a week if his occupation involved daily exposure to radiation.

Japanese nuclear physic scientists levelled a barrage of queries to their American counterparts on the genetic effects of radiation—effects on human inheritance in later generations.

The U.S. delegation members —six of them from the Atomic Energy Commission and another from the Department of Agriculture—answered that sufficient data were not yet available to determine maximal permissible limits from the genetic standpoint.

Dr. Merril Eisenbud, soon after the Bikini explosion last spring flew into Tokyo only to be snubbed by a group of Japanese doctors, reported that complicated calculations point to the probability that the current safety standards may be one thousand times lower than absolutely necessary for protection of health.

He said that no immediate change in the standards was forthcoming unless more data were collected.

Also heatedly discussed was the measurement of radioactivity in fish. Dr. Claus pointed out that occasional failure to detect a fish which would otherwise be jettisoned is not a cause for alarm, inasmuch as a person may take at a single meal all the radioactivity that he could take in over a period of several weeks or months with no significant bad effects.

Dr. Claus said that fish which, if monitored at a standard distance of 10 centimeters, gave a radiation count of 500 or less per minute on a gamma counter operated in accordance with the definite specifications would not be dangerous for human consumption.

During the ensuing discussions, it was reported that no surface contamination of fish was found in the United States during the extensive monitoring program at ports earlier this year.

Dr. Claus reported that, in order to get a reading of internal radioactivity in fish, it was necessary to determine the kinds of isotopes contained.

The debates was preceded by opening ceremony speeches in the morning. In his speech, Kankuro Kaneshige, on behalf of President of the Science Council of Japan Seiji Kaya, thanked the American savants for "consenting to come all their way to help us."

Kaneshige, however, regretted over the "unhappy consequences" which arose out of the Fukuryu-Maru (Fortune Dragon) incident of last March. And this point was underlined in a response, given by Dr. Paul Pearson, who "regretted that the first impetus for a meeting such as this among scholars should have come from an incident in human affairs which had unhappy consequences for some citizens of both nations."

(Photo shows a scene of the radiobiology conference.)