

Introductory Remarks by the Chairman

Burton G. Bennett

As is well known and has been stressed by speakers in the first session of this conference, the Chernobyl accident was an unprecedented disaster of very large scale. There was widespread radioactive contamination of the environment, harmful consequences to human health, and also substantial social and economic costs. It was the most devastating accident that could ever occur in a nuclear power plant, with total destruction of the reactor core and the release to the environment of enormous quantities of the radioactive materials.

Surely this was a unique event that will never be allowed to occur again. This one accident has given indelible lessons on reactor safety and on how to manage the response to such a catastrophe with effective countermeasures, protective actions, and recovery strategies.

The accident was so serious and consequences so diverse and complex that questions still remain on the actual effects caused by the accident and on what further measures of protection or surveillance might still be needed. Authoritative assessments of the many outstanding issues are needed to guide governments with useful and cost-effective measures to continue to deal with the accident and to advise and reassure the residents of the contaminated areas.

To contribute to better understanding of these issues and more effective management of the limited resources that can or must continue to be directed at the recovery process, the Chernobyl Forum was established as an initiative of the IAEA and sponsored by a number of international organizations.

The Chernobyl Forum has involved representatives of the governments of the affected region, who have been dealing with the social and economic aspects of the accident, and scientists who have experience in evaluating the health and environmental aspects of the accident. There has been a great desire to look back at the experience of the past two decades and then to continue forward in positive and effective ways to improve the health and economic well being of the residents of the three countries. We desperately need to reach consensus on this to make useful and sensible progress in dealing with the issues of the accident that still remain and that require and demand continued attention.

At the beginning of the Forum’s activities, we could all agree on the basic issues to be addressed. We all recognized the serious consequences of the Chernobyl accident, both in scope and duration of the distress and disruption that resulted.

We all appreciated the extensive efforts that have gone into the clean-up, remediation, monitoring, and, in general, dealing with the complex impacts on human health and on the environment.

We all understand that complex issues remain, and decisions must be made to ensure further recovery and well being of the affected population. Although radiation exposures are part of the problem, there are many other factors involved, including social disruptions, depressed economic development and psychological stress that detract from the well being of the populations of the affected regions.

We all desire a wider public understanding of the consequences of the accident and clear priorities for further research and to continue to effectively manage the recovery process.

We all hope that the Chernobyl Forum can contribute in a positive way to achieve consensus on disputed issues, to promote public understanding and to make realistic suggestions to help alleviate the lingering consequences of the accident.

Method of work of Forum

Many scientists as well as representatives from UN organizations and governments of affected regions participated in the work of the Chernobyl Forum. Several meetings of the Forum were necessary to initiate the work and monitor the progress of the expert groups. Two expert groups formulated comprehensive reports – one on environmental issues, organized by the IAEA, and one on health issues, organized by the WHO. Experts from throughout the world were invited to contribute to these evaluations. The representatives of governments and the staff of international organizations then reviewed the results of these groups to be sure that the reviews were complete and the evaluations reasonable, so that they could serve as the basis for consensus agreements and effective recommendations for further dealing with the consequences of the accident.

One person was selected as chairman of the Forum. Let me introduce myself. I am Burton Bennett, and at the time of my selection, I was Chairman of the Radiation Effects Research Foundation in Japan, the bi-national US-Japan organization studying the effects of radiation in survivors of the atomic bombings of Hiroshima and Nagasaki. This organization, RERF, is the foremost contributor in the world of understanding radiation effects and establishing the risks of radiation exposures. The epidemiological study at RERF is a lifetime follow-up project. So far, the work has continued for nearly 60 years, starting in 1947 shortly after the bombings. I am happy that RERF staff have been able to apply the knowledge gained there to other situations in need of careful study and evaluation.

I served as chairman of RERF for a four-year term from July 2001 until June 2005. I am thus only recently retired. Prior to my service at RERF, I served as director of the Secretariat for the United Nations Scientific Committee on the Effects of Atomic Radiation. My whole career has been devoted to studying and understanding the sources and effects of radiation. It has been my great pleasure to participate in the Chernobyl Forum.

Basis for Forum assessment

The work of the Chernobyl Forum did not materialize from a clean slate of absent information and unknown facts. Of course, we have built on the work of other efforts to review and assess the consequences of the Chernobyl accident. It was a tribute to the Soviet scientists to have an assessment ready for international presentation here in Vienna by August of 1986, just a few months after the accident. This started an effort to be open and factual with information then available.

The first assessment of the accident was published by UNSCEAR in 1988. Good estimates could be made at that time from numerous measurements in countries throughout Eastern and Western Europe and in other countries of the northern hemisphere of the amounts of radioactive materials released and their spread throughout the hemisphere. The experience in treating the highly exposed workers could also be described in the 1988 UNSCEAR report.

In 1990 and 1991 the International Atomic Energy Agency conducted the International Chernobyl Project, in which scientists from many countries who were experts on environmental and health aspects of radiation met with their counterparts in the Soviet Union to compare methods of evaluating radiation exposures and to conduct an extensive screening of health effects in the exposed population. This was an ambitious and highly successful project from the scientific point of view. Dr. Itsuzo Shigematsu served as chairman of the International Chernobyl Project. Dr. Shigematsu at the time was serving as chairman of the Radiation Effects Research Foundation. I am following him both at RERF and in the international Chernobyl evaluations. I would like to pay tribute to the very capable leadership of Dr. Shigematsu of the International Chernobyl Project. As he is attending this conference, I would like to ask him to stand and accept a tribute from all of us for his outstanding efforts in Japan and in the world to understand radiation effects. Thank you Dr. Shigematsu.

The person at IAEA who was most responsible for the conduct of the International Chernobyl Project and has been very much involved in supporting international efforts to establish radiation protection guidelines and advice was Dr. Abel Gonzales. He always gave us energy and inspiration to devote our very best efforts to our endeavours. I would like to thank Abel for his leadership of IAEA Chernobyl work over so many years until his retirement earlier this year.

Many of my colleagues, as did I, participated in the International Chernobyl Project, and these physicians and scientists continue to contribute their experience and expertise to the Chernobyl Forum. We will soon hear from three of them: Dr. Lynn Anspaugh, who will present the findings of the Expert Group on environment and Dr. Fred Mettler and Dr. Elizabeth Cardis, who will present the findings of the Expert Group on health. I would like to recognize these individuals as representatives of the many physicians and scientists who have been contributing for many years to Chernobyl evaluations.

During the time of the International Chernobyl Project and for some years after, the Sasakawa Foundation of Japan provided substantial support for Chernobyl projects, especially the IPHECA project of WHO. Many Japanese experts were able to contribute to the international work through this project, including Dr. Shigenobu Nagataki, my immediate predecessor as chairman of the Radiation Effects Research Foundation during 1997-2001. He was active in contributing to thyroid evaluations, his specialty, in giving overall support to the international efforts.

This conference happens to be an occasion for a reunion of chairmen the Radiation Effects Research Foundation in Japan. Dr. Shigematsu and Dr. Nagataki, who preceded me as chairmen, are here. Let me introduce the newly appointed chairman of RERF who succeeded me, Dr. Toshiteru Okubo. Dr. Okubo became chairman on July 1 this year. Prior to this he was President of the University of Industrial and Occupational Health in Kitakyushu, Japan. Dr. Okubo is attending this conference, and I would like to encourage his participation in international radiation assessment work.

Let me conclude my introduction by saying once again thank you to all of the scientists and physicians who participated in the Expert Groups, who have prepared the basis for our conclusions and recommendations. I would like to turn now to the presentations of the finding of the expert groups.