

ICRP Committee 1 Meeting

October 19, 23 and 24, 2015 – Seoul, Korea

Committee 1 reviewed the status of current radiation effects research programmes in the US, Europe, Asia, and other parts of the world. Recent activities of international organisations such as UNSCEAR and IAEA were also discussed. Furthermore, scientific results published in the open literature in various areas relevant for radiological protection including epidemiological studies of cancer and non-cancer diseases, genome-wide association studies, studies on biomarkers, mechanistic investigations of cardiovascular diseases and other tissue reactions, and other radiobiological studies, were reviewed and presented by members of the Committee.

The current status of Task Group 64 *Cancer risk from alpha emitters* was presented. While ICRP *Publication 115* prepared by this Task Group had focused on radon, its present work focusses on uranium and plutonium. Work of this Task Group will include a joint analysis of as many relevant nuclear worker cohorts as possible, including Sellafield and Mayak workers.

Much time was devoted to discussion of the work of Task Group 91 on *Radiation Risk Inference at Low-dose and Low-dose Rate Exposure for Radiological Protection Purposes*, and by the Working Party on *Detriment*. Additionally, Committee 1 had a joint session with Committee 4 on the work of Task Group 91, where the results of a workshop jointly organised by ICRP and Japanese experts in Kyoto, Japan, in May 2015, were also discussed, a report of which has been published as Rühm et al., *Radiat Environ Biophys* 54, 379-401, 2015.

Committee members participated in the *3rd International Symposium on the System of Radiological Protection*, which was organised in conjunction with the joint meetings of the ICRP Main Commission and Committees. W. Morgan, Chair of Committee 1, presented an overview of Committee 1 activities. Also, Committee 1 members organised – together with a colleague from UNSCEAR – a session on *New Developments in Understanding Radiation Effects*. There, S. Bouffler, Vice-Chair of Committee 1, made a presentation on *Evidence for Variation in Human Radiosensitivity and its Potential Impact on Radiological Protection*, while W. Rühm, secretary of Committee 1, made a presentation on *Dose Rate Effects in Radiobiology and Radiation Protection*, and J. Hendry, former Committee 1 member, talked on *New ICRP Publication 131: Stem Cell Biology with Respect to Carcinogenesis Aspects of Radiological Protection*.

The next meeting of Committee 1 will take place in Chennai, India in November 2016.