

ICRP Committee 1 Meeting

November 9–16, 2016 – Chennai, India

The latest Committee 1 meeting was held in conjunction with the *International Conference on Radiation Biology (ICRB)* (November 9–11 at SRM University) and included a number of satellite meetings with Indian scientists and organisations.

At the ICRB, Committee 1 organised a session where activities of the Committee were presented. This was followed by an open panel discussion with participants from the Committee and the Indian Association of Radiation Protection (IARP). The Committee was also involved in the organisation of sessions on “*Population Epidemiology and Environmental Radioactivity*” and on “*Natural Background Radiation*”, and contributed to several additional sessions.

During the closed Committee 1 meeting, much emphasis was placed on the discussion of the currently active Committee 1 Task Groups. Task Group 64 on *Cancer risk from alpha emitters* is currently focussing on the effects of incorporated plutonium with less emphasis on uranium. Work of this Task Group includes a review of the recent joint epidemiological analysis of the health of the Sellafield and Mayak worker cohorts, and calculation of lifetime lung cancer risk associated with plutonium contamination. Much time was also 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*. Task Group 91 is currently reviewing the scientific literature on dose and dose rate effects at the sub-cellular, cellular and organism level (including effects on exposed animals and humans). Task Group 102 on *Detriment calculation methodology* is documenting the procedure of detriment calculation in detail and is reproducing the calculations as presented in *Publication 103*. Task Groups 91 and 102 jointly met in Hiroshima at RERF, Japan, in October 2016. Progress of Task Group 92 on *Terms and Definitions* was discussed. The draft report on *The Use of Effective Dose as a Risk-related Radiological Protection Quantity* produced by Task Group 79 was also discussed.

Finally, the Committee reviewed the scientific literature in areas pertinent to its Terms of Reference including for example epidemiological studies of cancer and non-cancer diseases, genome-wide association studies, studies on biomarkers, mechanistic investigations of cardiovascular diseases and other tissue reactions. The status of current radiation effects research programmes in the US, Europe, Asia, and other parts of the world, as well as recent activities of international organisations such as UNSCEAR and IAEA were also discussed.

On November 14–16, meetings with scientists from the Indira Gandhi Centre for Atomic Research (IGCAR) in Kalpakkam, and the Sri Ramachandra University (SRU), Chennai, gave further insight into radiation protection research programs in India.

The next meeting of Committee 1 will take place in Paris, France, in October 2017.