

The Boice Report #53



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ICRP in Shenzhen

Twenty-five years ago I drove by Shenzhen, China (near Hong Kong), en route to Guangdong Province for studies of thyroid tumors and chromosome aberrations in areas of [high background radiation](#). Shenzhen was a sleepy fishing village of about 20,000 residents. Today it is a booming metropolis of well over one million citizens. It reflects the remarkable economic and scientific growth of the Chinese nation, reflecting the goals and aspirations of their leadership.

From 24 to 28 October 2016, the International Commission on Radiological Protection (ICRP) Main Commission (MC) met in Shenzhen, hosted by Hua Lui (National Nuclear Safety Administration, Beijing) and sponsored by the China General Nuclear Power Group (CGN). Our activities included a half-day meeting with the China Society of Radiation Protection (CSR), a traditional tea tasting, and a tour of the [Daya Bay Nuclear Power Plant](#). Daya Bay was remarkable, with CGN's focus on safety, a "village" of about 20,000 workers and families, beaches, and huge simulation facilities for fuel loading and transfer.

New ICRP Main Commission to be elected next year. Every four years, new MC members are elected. At least four members must be replaced, a medical doctor with relevant experience must be on the MC, and also a member from the United Kingdom must be identified to satisfy the ICRP status as a U.K. charitable organization. While not a binding directive, geological and gender diversity as well as having younger members with relevant experience are preferred.

Perhaps five to six MC members will be stepping down. MC members will nominate others to serve, and the election will be held in Lima, Peru, 8–12 May 2017. The call for nominations for the ICRP's committees will be coming out in early December, with nominations received till early in February. The elections of new committees will also take place in Lima.

The new Commission will start at the ICRP meetings and symposium to be held in Paris, 6–8 October 2017. The [2017 ICRP symposium](#) is being held in conjunction with the European Radiological Protection Research Week, which was so successfully launched this past [September in Oxford](#). I highly recommend going to Paris next year and attending not only the ICRP sessions, but also those from the [European community](#) with their impressive long-term vision for radiation protection, radiation biology, radiation in medicine, emergency response, radiation dosimetry, and radioecology. As I have mentioned so many times before, the United States remains at a [crisis level](#) in not training or providing opportunities for radiation professionals in the future. We should learn from our European colleagues.

Interesting issues in Shenzhen. Committee 5 on the environment will end at this term. The MC intent for Committee 5 was always for it to be term limited. We continued to approve the extension of the committee for several extra terms because of the important work being done. The work remains important and the process for further integrating the environment with the system of protection will be taken up by each of the committees with an MC task group to oversee the effort. There are many new topics available from the ICRP so I recommend a quick glance at the ICRP website. A few of my favorites include the presentations and abstracts for the RERF-ICRP Workshop on health risks



Server at Chinese Tea Ceremony
Photo Courtesy of John Boice

in October 2016 and ICRP Publication 133, *The IRPA Computational Framework for Internal Dose Assessment for Reference Adults: Specific Absorbed Fractions*.

In conjunction with the CSRP, a symposium was held including an overview on each of the five ICRP committees and excellent summaries of Chinese issues in radiation protection. Hopefully, these presentations will be made available for public viewing soon. I made a presentation (using slides translated to Chinese) on my personal experiences in China conducting health studies for over 30 years. These investigations include high background radiation in Guangdong Province, radon in Shenyang, radon in Gansu (where people lived in underground dwellings), underground tin miners in Yunnan (where 40% of the miners were children), blood studies in Tibet, and pioneering medical radiation workers.

Radiation activities. Recently, it has been challenging for me to choose a topic for coverage in the Boice Report series. The [Radiation Protection Week in Oxford](#) was incredibly informative and I learned a lot about the radiation activities in Europe.

Next was [Fukushima and thyroid cancer](#), which was the topic of Boice Report 52. I then went to the [Radiation Research Society annual meeting](#) in Kona, Hawaii, with the companion meeting of the Conference on Radiological Health. Both were remarkable, with several symposia in honor of Bill Morgan, and a highlight was the Failla Lecture by Norm Coleman, “The Radiation Stress Response: Of the People, by the People, and for the People.”

From Hawaii I went directly to Shenzhen, China, which is the focus of this Boice Report; then the exceptionally informative [Beebe Symposium on Chernobyl](#); and then a tuberculosis (TB) fluoroscopy grant meeting in San Francisco. The Canadian TB fluoroscopy study is being reactivated. In years past, patients were treated with lung collapse and associated fluoroscopies to determine or monitor the amount of air injected into the pleural cavity. Unfortunately, many years later these patients developed [breast cancer](#) but, interestingly, [not lung cancer](#).

On 10 November 2016 the world lost one of the greatest pioneers in radiation protection, [Bo Lindell](#) from Sweden. He was vice chair of the ICRP MC and then became the eighth chairman. He served continuously on radiation protection committees and also on the United Nations Scientific Committee on the Effects of Atomic Radiation for many years. He was 94 and was writing his memoirs on radiation protection. It was not so long ago that I shared podiums with him at several gatherings in Scandinavia, notably Denmark and Sweden. He was not only a great man, but a kind man.

ICRP Main Commission in Shenzhen, China—27 October 2016



Atop the China General Nuclear building, helicopter landing pad, left to right: Donald Cool (United States), Hua Liu (China), John Harrison (United Kingdom), Werner Rühm (Germany), Kathy Higley (invited, United States), Vice Chair Jacques Lochar (France), Chair Claire Cousins (United Kingdom), Scientific Secretary Christopher Clement (Canada), Jai-Ki Lee (Korea), Hans-Georg Menzel (Germany), Carl-Magnus Larsson (Australia), Ohtsura Niwa (Japan), Eliseo Vañó (Spain), John Boice (United States), and Sergey Romanov (Russia)

Photo courtesy of Wan Wei