

Babies, Spiders, and Persimmons; Adventures in Post-Fukushima Japan **[the abridged version]**

In the 6+ years since the March 2011 earthquake and subsequent Tsunami damaged the three Dai-Ichi nuclear power plants, many different radiation measurement devices and methods have been deployed; Many of those were by Canberra, including: Spectroscopic on-line measurements of the first water processing unit on the site; Food measurement systems, both HPGe and NaI; In-vivo measurement systems, both fixed and mobile; In-vivo high-sensitivity system for babies and children; Automatic assay of bags of rice from Fukushima Prefecture; High sensitivity system to assay boxes of persimmons; Assay system for trucks loaded with sacks of soil; On-line water measurement system for SrY90 at levels suitable for release to the environment; and a Mobile system to prove that rolls of grass are safe enough for feed to cows. As promised, Spiders will also creep into the presentation.

Biography

Frazier has BS in Nuclear Engineering [Missouri University of Science and Technology] and a MS in Radiological Health [University of Oklahoma].

His first job was at AFRRRI [Armed Forces Radiological Research Institute], as the head of the HP laboratory. AFRRRI has a plethora of interesting radiation exposure devices for the beginning HP to explore; a reactor where they blow the control rods out with compressed air, a LINAC with beam currents in the Ampere range, a large flash X-ray machine, and 1M Curies of Co60, all designed to make life challenging for poor unsuspecting rats monkeys pigs, and the occasional falcon.

He then moved to start up Radiation Management Corporation in Philadelphia, where he was in charge of the Radiation Measurement Laboratories. He built the first of many Whole Body Counters there, along with creating what eventually became the largest commercial radiation measurement laboratory in the US at that time. He was then exiled to cold Chicago to set up RMC's first branch office to provide HP consulting and Radiation Measurement Services. Eventually he was managing that office along with the Philadelphia and Denver and Washington DC offices.

Canberra purchased RMC and then he moved to Connecticut and has been there in an R&D and Product Management role for the past ~30 years, where is currently the Scientific Director. During that time he has been responsible for the creation and promotion of many applied health physics products.

He was Certified in the Comprehensive Practice of Health Physics by the ABHP so long ago that he has no more space left on his Plaque for the un-necessarily large recertification sticker. He has previously been Chairman of the ABHP and President of the AAHP, and President of the Chicago and Philadelphia Chapters.

He has an attraction to radiation accidents. He arrived at TMI 2 days after the accident, leaving 30 days later, and then managed RMC's on-site measurement laboratory and other projects. For Canberra, he was involved in their post-Chernobyl response. And for the 5 years after the Fukushima accident, Canberra's response was his primary activity.

After the Mirion purchase of Canberra, he is now a member of the newly formed Characterization division, still following up on Japan opportunities as they come up, but primarily focused on exploring technologies for new products and new measurement solutions, and opportunities to deploy them.