Why Radionuclides are Good for You.

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The UK is embarking on a significant expansion of its nuclear reactor portfolio with ambitious plans for new build starting with a Pressurised Water Reactor at Hinkley Point in Somerset. This talk defines radionuclides and illustrates their benefits to mankind. It takes a general look at radionuclides in the environment, ourselves, in medicine, space and energy applications and summarises the current global nuclear fission and fusion scene. Finally, public attitudes to risks associated with nuclear technology are discussed.

Bill has a BSc in Physical Metallurgy from Aston University, Birmingham UK and a DPhil in Radiation Damage in Sapphire from Oxford. He was a post doc at Case Western Reserve University 1983-85 and Assistant Prof at Ohio State, USA 1986-89 before returning to Sheffield University in the UK where he remained until becoming Head of the Materials Department at Imperial College London in 2006. He was Director of the Centre for Nuclear Engineering at Imperial 2010-2016. He is a member of the UK’s Nuclear Innovation and Research Advisory Board (NIRAB), the Leverhulme Trust Panel of Advisors, the Royal Academy of Engineering International Activities Committee, the Technical Advisory Board of Morgan Advanced Materials and the Scientific Advisory Board Tokamak Energy plc. He was previously Deputy Chair of the UK Government advisory Committee on Radioactive Waste Management (CoRWM) from 2007-2013, has acted as special advisor nuclear to the House of Lords Science and Technology Committee (2013-14). He is currently President of the American Ceramic Society, and fellow of the Royal Academy of Engineering, American Ceramic Society, Institute of Materials, Minerals and Mining, and the City and Guilds Institute. He has published over 400 papers, 4 authored and 10 edited books and 9 book chapters and has supervised 59 students to completion of their PhDs in the area of ceramic engineering.