

Biography

Dr. Colin J Martin, PhD

*Vice Chairman
ICRP Committee 3*

Qualifications:

PhD, University of Birmingham



Colin Martin began his career as a medical physicist in 1976 with Aberdeen University and Aberdeen Royal Hospitals, initially working in the field of ultrasound and non-ionising radiations. He became a lecturer in radiation physics and radiation protection in 1983 and taught for 20 years on the Aberdeen University Medical Physics MSc course.

Colin became Head of Radiation Protection for Grampian Health Board in 1990 where he oversaw the setting up of diagnostic radiology equipment testing and optimisation programmes for the Grampian Region in North East Scotland. In 1995 he took up the post of Head of Health Physics for NHS Greater Glasgow with responsibility for management of radiation protection, diagnostic radiology physics, and non-ionising radiation physics services for hospitals throughout the West and Borders of Scotland. His other roles included investigation of radiotherapy incidents reportable to the Scottish Ministers.

While working in Aberdeen and Glasgow he developed methods for testing different types of X-ray equipment, focussing on CT in later years. He established programmes for patient dose audit, linking this with equipment testing in order to optimise radiation protection and equipment performance. Apart from diagnostic radiology, other areas of research include methodologies for specification of shielding for x-ray facilities, development of ultra-violet dosimetry techniques for phototherapy applications, and improvement in personal dose monitoring for hospital workers, currently focussed on evaluation of doses to the eyes and extremities. Colin has also been instrumental in promotion of an understanding of radiobiology among medical physicists and doctors, to which end he initiated and helped to organise the 21st International L H Gray Conference on the Radiobiology/Radiation Protection interface, and has written chapters on Radiobiology in books for physicists and clinicians.

Colin was awarded the Founders Prize from the Society of Radiological Protection in 2003 for contributions of distinction to Radiation Protection, and the Barclay Prize from the British Institute of Radiology (BIR) in 2006 for outstanding contributions to the British Journal of Radiology. He was awarded an Honorary Fellowship from the Society for Radiological Protection in 2015 for recognition of his work in the field, and is a Fellow of the Institute of Physics and the Institute of Physics and Engineering in Medicine (IPEM). Colin retired from his NHS post at the end of 2013, maintaining his position as honorary clinical senior lecturer at the University of Glasgow. He joined Committee 3 of the International Commission on Radiological Protection in 2013, whose task is to develop guidance and advice on protection in medical applications of radiation, and became Vice-Chair in 2017.

He has contributed to ICRP publications on education and training in radiological protection, diagnostic reference levels, occupational protection for interventional procedures, and radiopharmaceutical doses to patients. He is currently chairing an ICRP Task Group on optimisation in digital radiology applications and is a member of another on use of effective dose.

Colin now undertakes missions for the International Atomic Energy Agency delivering courses or providing advice to governments on various aspects relating to diagnostic radiology medical physics in Africa, Eastern Europe and the Middle East, and lectures on courses provided by other organisations such as the European Federation of Medical Physics. He has recently chaired IAEA Technical Meetings on prevention of unintended or accidental exposure, for radiology in 2017, which published guidelines in December 2017 and for nuclear medicine earlier in 2018.

He is involved in a number of other international and national radiation protection organisations, including the International Radiological Protection Association and the Committee On Medical Aspects of Radiation in the Environment (COMARE), a Scientific Advisory Committee to the UK Government Department of Health and Social Care. Currently, he is chairing a COMARE sub-committee preparing recommendations on use of dual-energy X-ray absorptiometry (DXA) scans for sports performance assessment, and an IPEM working party preparing guidance on personal dosimetry requirements in Healthcare.

Colin has written more than 200 scientific articles/book chapters, including 140 papers in peer reviewed journals on a wide range of topics relating to radiation protection in all aspects of medicine. He is a member of editorial boards for the Journal of Radiological Protection and Radiation Protection Dosimetry, and reviews paper for other journals, including Physics in Medicine and Biology, Medical Physics, British Journal of Radiology, Radiology, Physica Medica, and Radiation Measurement. He is co-editor of a textbook entitled Practical Radiation Protection in Healthcare, the 2nd edition of which was published by Oxford University Press in 2015. He has co-authored other books on Radiation Shielding for Diagnostics Radiology, now in its 2nd edition, Medical Imaging and Radiation Protection for Medical Students and Clinicians, and Personal Protective Equipment, all published by the BIR.

His hobbies and interests include hill walking, painting, choral singing, tennis, cycling, travel and gardening.