

Carmel J. Caruana Ph. D., FIPEM

carmel.j.caruana@um.edu.mt

Professor Carmel J. Caruana graduated B.Sc.(Hons) in Mathematics and Physics from the University of Malta in 1976. In 1990, he earned an M.Sc. in Applied Radiation Physics at the University of Birmingham where he won the Fremlin prize for his thesis. In 2006, he was awarded a Ph.D. from the Faculty of Mathematics and Physics, Charles University, Prague. Full Professor and Head of Medical Physics at the University of Malta, Professor Caruana specializes in diagnostic and interventional radiology, radiation protection, medical devices, physical agents and legislative, professional and education and training issues in Medical Physics. He has taught aspects of Medical Physics not only to physicists but also to medical doctors, radiologists, radiographers, nurses, medical laboratory scientists both in his home country Malta and in several countries in Europe. Recognizing the importance of education and training and professional issues for the development of the Medical Physics profession he has dedicated the last twenty years of his career to these issues and has over sixty papers and innumerable conference presentations in these areas to his name. He is past-chairperson of the Education and Training Committee of the European Federation of Organizations for Medical Physics (EFOMP), lead author of the role and education and training chapters of the EU document 'European Guidelines on the Medical Physics Expert', lead author of the main EFOMP policy statements on education and training (PS12.1 Recommendations on Medical Physics Education and Training in Europe) and the role of the Medical Physicist (PS16 The

role and competences of medical physicists and medical physics experts under 2013/59/EURATOM) and past Associate Editor for Educational and Training and Professional issues for Physica Medica, the European Journal of Medical Physics. When Chairperson of the said committee he set up the European School for Medical Physics Experts in Prague. He always says that he chose Prague because of the beauty of the city and because it is in the centre of Europe and hence easily accessible to all Medical Physicists in Europe. Recognizing that the issue of strong leadership is critical for the profession at national, regional and international levels he set up and authored the EUTEMPE-EFOMP leadership module 'Leadership in Medical Physics, Development of the profession and the challenges for the Medical Physics Expert' which was the first such module worldwide (https://eutempe-net.eu/mpe01/). In 2020 he published the first ever book on leadership in medical physics entitled 'Leadership and Challenges in Medical Physics: A Strategic and Robust Approach' (https://iopscience.iop.org/book/978-0-7503-1395-7). He has presented on leadership in many countries all over the world and is considered the world leader in this area. He was one of the first members of the International Medical Physics Certification Board where he wrote the first syllabi and was first Chairperson of Accreditation Committee one. In his home country Malta he developed the Medical Physics profession from a position of total obscurity to the point when it was recognized legally.