



WNU SCHOOL ON RADIATION TECHNOLOGIES PROGRAMME COMMITTEE

WALTAR ALAN E. (CHAIRMAN)

Dr. Alan E. Waltar recently retired as Senior Advisor to the Pacific Northwest National Laboratory (PNNL) in Richland, WA., having previously served as Director of Nuclear Energy. He was Professor and Head, Nuclear Engineering, Texas A&M University from 1998 to 2002, where he helped to build that program into the largest Department of Nuclear Engineering in the nation.

Dr. Waltar served as President of the 16,000-member American Nuclear Society during 1994-1995. He was elected a Fellow of the Society in 1984. He holds a B.S. in electrical engineering (University of Washington, 1961), an M.S. in nuclear engineering (MIT, 1962), and a Ph.D. in engineering science (University of California, Berkeley, 1966).

His distinguished career with Westinghouse Hanford Company included leadership positions in several areas of advanced reactor technology—mostly related to the regulatory approvals and subsequent operations at the Fast Flux Test Facility (FFTF). He served on the faculty at the University of Virginia where, with Professor Albert Reynolds, he co-authored the *Fast Breeder Reactors* textbook. Along with the Russian translation, this book has become one of the standard instructional books for fast spectrum reactors. This book was updated and published by Springer Publishing in 2012 under the title *Fast Spectrum Reactors*. The Japanese translation of this book was finished in 2016. In addition to organizing numerous international technical conferences, Dr. Waltar has published over 75 open literature scientific articles.

Dr. Waltar was instrumental in the formation of the World Nuclear University (WNU) Summer Institute (SI) and has served as a mentor and a member of the faculty for the last twelve years. He also helped organize and participate as lecturer/mentor at the inaugural 2010 WNU Radioisotope School in Seoul, South Korea and the follow-on RT schools in 2012 and 2014. He was recently inducted into the Washington State Academy of Sciences.

Dr. Waltar authored *America the Powerless: Facing our Nuclear Energy Dilemma* in 1995 and in 2004 published *Radiation and Modern Life: Fulfilling Marie Curie's Dream*, which articulates the enormous beneficial uses of radiation to society.

Dr. Waltar has served as a consultant to the Pacific Northwest National Laboratory, the International Atomic Energy Agency, the U.S. Department of Energy, the U.S. Air Force Scientific Advisory Board, the Advanced Medical Isotope Corporation, and several private nuclear firms.



AL-QARADAWI, ILHAM

Prof. Ilham Al-Qaradawi is Professor of Nuclear Physics at Qatar University and Adjunct Professor of Physics at Texas A&M University in Qatar. She received her Ph.D. working in the field of positron physics from University of London, UK in 1991. Over the past decade at Qatar University, she has established a positron lab and successfully built the first variable energy slow positron beam in the Middle East. She has also established a radiation measurement lab carrying out research in the area of environmental radiation physics. She is involved in many research projects and collaborations on local, regional and international levels. Her research is mainly in the field of positron physics working on various types of materials. She is involved with CERN in the Antihydrogen experiment AEGIS. She is also involved environmental radiation research and in physics education research. She represents Qatar in many areas related to nuclear, radiation physics and science education on the regional and international level. She is the General Chair of the 9 WCI International Conference on Isotopes 2017. She is a keen educator who is always working to raise the standards of science awareness and teaching particularly in physics. She is the founder of the Qatar Physics Society; through which she regularly holds training workshops for physics teachers and other activities in an effort to spread physics knowledge and nuclear awareness well as improve physics education. She has lectured in the World Nuclear University Summer Institute for the past four years. Prof. Ilham Al-Qaradawi was awarded the Qatar University award for excellence in research in 2004 and the Ahmed Badeeb Prize for Arab Women in Science in 2008. She has had many appearances on Al-Jazeera channel and several other TV channels and newspapers and magazines. She is an inspirational role model for young women considering a scientific career.



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BONET, HENRI

From 1997 to 2008, Henri Bonet was CEO of the National Institute for Radioelements (IRE) in Belgium, one of the world leaders for production of medical radioisotopes and for environmental monitoring systems. Following that, he became Senior Advisor to his successor before retiring in July 2009. He graduated in 1968 as Nuclear-Physics Engineer at Liège University and was first with Belgonucleaire for 12 years, as Design Engineer for Light Water Reactor (LWR) fuel management and as Senior Engineer for Safety Analyses for LWRs and fuel cycle industries. He was in charge for 9 months' training of a Korean team, in radiological protection & safety. Then for 4 years he headed the system analysis group in the Authorized Inspection Agency Vinçotte, reviewing the licensing for the start up of the four last Belgian PWR. In 1985, he joined Exxon Nuclear International, later on taken over by SIEMENS-KWU, where he was Manager Contract Administration and Business Development for Services and LWR nuclear fuel sales in Belgium, France and Sweden. During his career, he was appointed as member of the scientific advisory commission of the Nuclear Safety Agency (FANC), Expert in the National Nuclear Energy Evaluation Commission and Expert for several IAEA, OECD and CEE working groups. He was President of the Belgian Nuclear Society and of the Supervisory Board of CIS bio International (currently IBA-Molecular) and he was Director at the Board of the Belgian Nuclear Research Centre CEN/SCK, STERIGENICS and TRANSRAD. Mr Bonet was lecturer and mentor at the WNU RT School and Summer Institute.



CHEMALY, CARLO ROBERT

Carlo R. Chemaly is currently business developer at Pharmalead, a family business active in the fields of promotion of pharmaceutical products and medical equipment.

In his career, Mr. Chemaly has worked at the European Commission and as an independent. Experiences at the European Commission have been in the fields of management support (1996-2000, executive assistant, communication officer and deputy quality officer), project management (2003-2006, responsible for project EMIR - European network for Medical Isotopes and beam Research) and finance and management (2006-2009, responsible for budget planning & financial control of Youth, Sports & Citizenship Directorate). As an independent, experiences have included a number of market surveys and a one-year experience (2002) in setting up a company in the field of energy trading.

His experience in the field of isotopes has been whilst managing the EMIR project of the European Commission. Main achievements include the organisation of the 5ICI (5th International Conference on Isotopes) and the joint publication of a Radioisotope Survey. As a result, Mr. Chemaly has remained present in the field, participating on the International Monitoring Steering Committee of 6ICI, the World Council of Isotopes and was lecturer and mentor at the first RI School. Mr. Chemaly's academic background is in business. He graduated in 2001 from Insead (France) with a M.B.A. (Masters of Business Administration) and in 1996 from the Solvay Business School (University of Brussels, Belgium) with M.Sc. in "Business Engineering". Having lived in a number of countries (Belgium, Lebanon, The Netherlands, France, Italy, Canada, Singapore, Germany) and having worked at the European Commission Mr Chemaly has developed, in addition to specific language skills, a certain feeling for managing in cross-cultural environments.



COECK, MICHÈLE

Dr. Michèle Coeck obtained a PhD in Physics at the KULeuven (Belgium) in 1998 and has a post-graduate from the same university in Science Communication and Education.

She started at the Belgian Nuclear Research Centre on a project related to materials sciences (study of defects in neutron irradiated silicon) at the BR2 reactor. In 1998 she became scientific collaborator at the Radiation Protection Department. Her main responsibilities were the management of the nuclear calibrations laboratory and project collaborator in neutron dosimetry research. In parallel she was contributing to the SCK•CEN international school for Radiation Protection, first as lecturer and later on also as project manager.

In 2006 she became responsible for the Group Communication, Education and Knowledge Management. Today, she focusses on leading the SCK•CEN Academy for Nuclear Science and Technology, which was launched in 2012.

Michèle Coeck is coordinating the series of ENETRAP EC projects dealing with education and training in radiation protection and is an active partner in several EC FP7 and H2020 education and training projects such as TRASNUSAFE, GENTLE, ANNETTE, ENEN-RU, ENEN+, etc. She is a member of the Board of EUTERP (European training and education in radiation protection Platform) and ENEN (European Nuclear Education Network), chairing the ETKM Task Force of ENS/FORATOM and member of the IAEA Steering Committee for education and training in radiation protection transport and waste safety and participating to many other IAEA technical meetings and advisory groups. She also participates to the Senior Advisory Group of the European Human Resource Observatory for Nuclear (EHRO-N).



GONZALEZ, ABEL JULIO

Mr Abel Julio González is an Argentine Academician, expert on the protection against radiation and nuclear safety and security. -Plenary member of the Argentine National Academy of Sciences of Buenos Aires, of the Argentine Academy of Environmental Sciences and of the Argentine Academy of the Seas, as well as of the International Nuclear Academy. Founding member of the Argentine Radioprotection Society; Representative at the United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR); he has served to UNSCEAR for more than 40 years. Regular member Argentine delegation to General Conference and Board of Governors of the International Atomic Energy Agency (IAEA) and a member of the IAEA Commission of Safety Standards.



- Ex-Director of the IAEA Division of Radiation Transport and Waste Safety for 20 years, where he led many environmental radiological evaluations, such as those performed in the Bikini Atoll of the Marshall Islands, in the Mururoa and Fangataufa Atolls of the French Polynesia and in the Semipalatinsk area in Kazakhstan, as well as many radiation accidents appraisals including the international assessment of the Chernobyl accident. Recently, he has been responsible for the IAEA evaluation of the radiological consequences of the Fukushima accident.
- Became member of the International Commission on Radiological Protection (ICRP) in 1976 and served as ICRP Vice-Chairman from 2008 to 2013.
- Regular lecturer at international curricula including the schools and courses of the World Nuclear University and the University of Montpellier.
- Ex-Vice-President of the International Radiation Protection Association (IRPA) and President of the 2008 XIIth International IRPA Congress (IRPA12).
- Published over 200 scientific and technical papers, contributed towards equal number of publications of international committees and groups. Honoured with several international awards including the Morgan Award twice in 2000 and 2003, the Sievert Prize in 2004, the Lauriston S. Taylor Lecturer Award in 2005 and the Marie Curie Prize in 2008 and the Academician Georgyi A. Zedgenidze medal in 2012. He shared the Nobel price granted to the IAEA in 2005.

LEE, MYUNG CHUL

Prof. Myung-Chul Lee was the first MD researcher who started his resident career in the field of nuclear medicine in Korea. His research is concerned with the research and development of new radiopharmaceuticals research and clinical application of positron emission tomography(PET) and cyclotron technology; nuclear neurology area including diagnosis and treatment in dementia, epilepsy and brain tumors; radionuclide treatment in various diseases; and quantitative and qualitative analysis in nuclear brain imaging. From the beginning of the Department of Nuclear Medicine in SNUH, he devoted himself to the establishment of the department. In 1994, he introduced a PET scanner to SNUH, which was the first PET scanner in Korea. It initiated many outstanding researches and the present boom of PET and PET/CT in Korea. In 1995, the Korean Board of Nuclear Medicine was started by his critical contribution. Through his whole life, he has devoted himself to the development and upgrade of the nuclear medicine of Korea. He served as the 9th President of the World Federation of Nuclear Medicine and Biology (WFNMB) from 2002 to 2006, Director General of Bio-Max Research Institute, President of Gachon Univ. Gill Medical Center, President of Korean Society of Nuclear Medicine, President of Korean Association for Nuclear Medicine Promotion, President of Korean Society of Human Brain Mapping, President of World Council for Isotopes(WCI) and President of Korea Armed Forces Capital Hospital. Currently, he is the President of the Korean Academy of Science and Technology (KAST), and is also serving as Vice Chairperson of Presidential Advisory Council on Science and Technology (PACST) and President of Korea Association for Radiation Application (KARA).



OSSO JUNIOR, JOAO ALBERTO

Mr Joao Alberto Osso Junior, Brazilian, has a Ph.D. in Nuclear Chemistry by the University of Manchester, England, a M.Sc. in Nuclear Engineering by the Federal University of Rio de Janeiro (UFRJ), Brazil and a B.Sc. in Chemistry by the University of Sao Paulo (USP), Brazil. He started working at the Institute of Nuclear Engineering (IEN-CNEN/RJ) in Rio de Janeiro, Brazil in 1979 and then moved to the Institute of Nuclear and Energetic Researches (IPEN-CNEN/SP) in Sao Paulo, Brazil in 1991. He had more than 34 years of experience in research, managerial, academic and production activities in both Institutes in Brazil. He has experience as a lead R&D researcher in different fields of Nuclear and Radiation Applications such as: radioisotope production in Cyclotrons and Research Reactors; preparation of targets for irradiation in Cyclotrons and Research Reactors; radiochemical methods of separation and purification of radioisotopes for use in Nuclear Medicine and as radioactive tracers and standards; preparation of PET, SPECT and therapeutic radiopharmaceuticals; preparation of radioisotope generators for use in Nuclear Medicine; quality control of radioisotopes, radiopharmaceuticals and generators eluates; pre-clinical imaging of radiopharmaceuticals; regulatory issues on the production of radioisotopes, generators and radiopharmaceuticals; utilization of Electron Beam Accelerators and Gamma irradiators and radiation processing. During the last 25 years, he also held the position as professor and supervisor in the Nuclear Technology post-graduation program of IPEN connected to USP in the area of nuclear applications and supervised more than 40 M.Sc. and Ph.D. students. He joined the International Atomic Energy Agency (IAEA) on 08th February 2014 as Section Head of the Radioisotope Products and Radiation Technology Section, Division of Physical and Chemical Sciences.



RAMAMOORTHY, NATESAN

Dr. N. Ramamoorthy, Ph.D. in Chemistry from University of Bombay, India, is the Senior Advisor to the Director of Bhabha Atomic Research Centre (BARC) in Mumbai, India. He is a professional expert in the field of production and utilisation of radioisotopes and radiopharmaceuticals using research reactors and cyclotrons, and has been involved in several projects and activities related to radiation technology practices and applications. He has nearly 40 years of professional and managerial experience in the above programmes and has held various positions of diverse responsibilities - in India and abroad – related to research and development, production operations and management, international collaborations and cooperation. He has been actively involved in a number of professional bodies such as Indian Nuclear Society and was the President of the Society of Nuclear Medicine, India in 2000-2001.



Dr. Ramamoorthy was the Director of the Division of Physical and Chemical Sciences at the IAEA from October 2003 to March 2011. He was the Manager of the IAEA Programmes on, 'Nuclear Science' and 'Radioisotope Production and Radiation Technology' and led a team of 40 professionals and 34 general staff serving in the Division.

Dr. Ramamoorthy was Chief Executive of the Board of Radiation and Isotope Technology, a Unit of Dept. of Atomic Energy, Govt. of India, in Mumbai from August 2000 to September 2003. In his adjunct role as Associate Director, Isotope Group, BARC, during the same period, he steered the R&D programmes in BARC in the areas of radioisotope products, radiation technologies, radiation processing and their applications. He has a large number of publications to his credit and has delivered lectures in different forums, e.g. in conferences, seminars and teaching & training events.

SAMPA, MARIA HELENA DE OLIVEIRA

Dr Sampa obtained her M.Sc. and Ph.D. in Nuclear Technology Applications at IPEN/University of São Paulo – Brazil. From 1976 to 2005 she was researcher and head of Division of Research and Development of Radiation Technology Centre at IPEN/CTR where the main activities were to manage and coordinate R&D projects in the field of application of ionizing radiation (electron beam accelerators and gamma radiation) in industrial and environmental process. She was also involved in organization of Conferences, Seminars, Symposia and Meetings and has been acting as Member of Scientific Committee of national and international conferences. She worked at IAEA – International Atomic Energy Agency from 2006 to 2011 as Technical Officer in Radiation Processing Technology at Industrial Applications and Chemistry Section of the Nuclear Applications (NA) Department, Division of Physical and Chemical Sciences. She was President of the Brazilian Nuclear Energy Association (ABEN) from 2000 to 2002 and has been involved in professional societies such as American Nuclear Society – Latin American Section (ANS/LAS), Technology Based Business Incubator Center (CIETEC) and others. She received awards in the nuclear field: in 2001 Medal "Carneiro Felipe" received from Brazilian Nuclear Energy Commission (CNEN) and in 2002 Medal "Friends of Navy" received from Brazilian Navy. She has many publications in the field and has delivered lectures in different forums and a reviewer of papers for international journals. Dr. Sampa currently is Consultant in radiation processing technology for industry, environment preservation, decontamination of art objects and irradiation facilities for the IAEA, IPEN and CNEN.



SAN LUIS, TEOFILO O.L.

Dr. Teofilo San Luis currently serves as a Dean of the Asian School of Nuclear Medicine (ASDN) established as the educational arm of the Asia Regional Cooperative Council of Nuclear Medicine (ARCCNM). He obtained his B.Sc. in Letran College, Manila in 1967 and Doctor of Medicine at University of Santo Tomas (UST), Manila in 1972. After residency he was appointed into the UST Faculty of Medicine & Surgery (1975), and eventually promoted to Professor at the age of 46. He earned his Master of Arts degree in Public Administration from UST (1994) and became holder of the Mariano M. Alimurung Professorial Chair in Medical Education. He chaired the Department of Nuclear Medicine at St Luke's Medical Center (2000-2007) and the Section of Nuclear Medicine at the UST Hospital (2006-2010). He had a short stint at the IAEA Division of Human Health, Nuclear Medicine Section (2002) and conducted various regional training courses in Nuclear Medicine in Asia, Africa & Latin America before becoming Dean of the St Luke's College of Medicine – William H Quasha Memorial (2002-2005). Previously, he served as the President of various professional & civic organisations including the Radioisotope Society of the Philippines (1983-1984), Philippine Society of Nuclear Medicine (1994-1996), Philippine Thyroid Association (2000-2002) He is currently working as a Director of the International Council for Control of Iodine Deficiency Disorders (ICCIDD); Secretary-Treasurer of the Asia-Oceania Thyroid Association (AOTA); Chair of the Philippine Specialty Board of Nuclear Medicine (PSBNM); and Chair of the Thyroid Council of the Philippines.



STARVOITOVA, VALERIA

Dr. Valeria Starovoitova graduated from Purdue University in 2007 with a doctoral degree in physics. She specialized in computational biophysics and performed her research at the Advanced Photon Source located at Argonne National Laboratory. After graduation, Dr. Starovoitova joined the Physics Department at Idaho State University, first as a Postdoctoral Researcher, and later as a Research Assistant Professor. In 2009 she was invited to help establish a radioisotope research program and form an interdisciplinary medical isotope production group at the Idaho Accelerator Center. As the lead physicist of this new interdisciplinary group, Dr. Starovoitova developed techniques for photo-nuclear production and separation of medical isotopes. She performed the Center's first radio-isotope production efficiency experiments, and helped develop commercially viable methods to produce Cu-67, a promising beta-emitter. She also contributed to other applied nuclear physics projects, such as nuclear waste transmutation and photon activation analysis. In 2013 Dr. Starovoitova joined Niowave, Inc., the only company worldwide that delivers and commissions complete superconducting accelerator systems for national laboratories and private businesses. She established the Applied Nuclear Physics & Chemistry Department which currently consists of over ten scientists and engineers and focuses on commercial uses of electron accelerators. Under Dr. Starovoitova's guidance the Department is successfully pursuing a number of projects including fast neutron source development (in collaboration with Los Alamos National Laboratory), high activity gamma source replacement, high power positron production development (in collaboration with Thomas Jefferson National Laboratory), and radiochemical separation of uranium fission fragments (in collaboration with Argonne National Laboratory). Dr. Starovoitova joined IAEA/NA in 2018.



STEVENSON, NIGEL R.

Dr. Stevenson obtained his Ph.D. at the University of London, UK in 1983 in Nuclear Physics. Subsequently he worked as a research scientist at TRIUMF, the Canadian Accelerator Facility, with the University of Saskatchewan, Canada group. Starting in 1990 he headed up the Isotope Production and Applied Technology group at TRIUMF responsible for the production of a wide variety of radioactive medical isotopes for MDS Nordion in addition to specialized isotope production technology. In 1999 he became the V.P. of Isotope Production and Research for Theragenics Corporation in Atlanta, GA. In this role he was responsible for installing and operating the world's largest cyclotron facility (14 machines) used to produce radiochemicals for pharmaceuticals and medical devices. He also had technical oversight of a large scale stable isotope separation facility in Oak Ridge, TN. In 2006 he was appointed the Chief Operating Officer of Trace Life Sciences located near Dallas, TX which produces radiochemicals and radiopharmaceuticals. Since 2007, Dr. Stevenson has been the Chief Operating Officer of Clear Vascular, Inc. (Houston, TX) – a company involved in the production and evaluation of radiotracers for vascular imaging and therapy. Additionally, he is the CEO of TcNet, LLC, a company that is investigating the use of PET cyclotron systems to produce a number of additional radiochemicals. Dr. Stevenson serves as the Chief Science Advisor to Advanced Medical Isotope Corporation in Kennewick, WA. Dr. Stevenson has organized several isotope conferences and conference sessions over the years including the 3rd International Conference on Isotopes held in Vancouver in September 1999 where he served as the Conference Chairperson. He has also had various roles in the International Isotope Society including that of the President of the Canadian Chapter.



VENKATESH, MEERA

Dr Meera Venkatesh, is Director of the Division of Physical and Chemical Sciences in the Department of Nuclear Applications, International Atomic Energy Agency (IAEA). She joined the Bhabha Atomic Research Centre (BARC), India, in 1976 after graduating in Chemistry from Bombay University in India. From 1977 she was engaged in the research and development of radiopharmaceuticals at BARC. From 2003, she headed the Radiopharmaceuticals Division at BARC, which was responsible for production of radioisotopes and development of radiopharmaceuticals. She also concurrently served at the Board of Radiation and Isotope Technology (BRIT), the commercial unit of the Department of Atomic Energy, India, from 2000, overseeing the quality control program of radiopharmaceuticals & radiochemicals, and held the post of Senior General Manager at BRIT.



Dr Venkatesh obtained her doctorate degree from the Bombay University in 1986 and worked as a post-doctoral research associate at the University of Missouri, USA, from 1992-94, where she was later invited to act as Associate Professor in 1999. Ms.Venkatesh has published nearly 140 papers in international journals, authored several book chapters & articles and is an editor of three international journals in areas related to radiopharmaceuticals. She was bestowed with the Indian Nuclear Society Award in 2008 for her professional excellence and outstanding contributions in the field of radioisotopes and their applications. In 2009, she received the HomiBhabha Award as the Team Leader for outstanding contributions towards production and supply of radioisotopes and radiochemicals for medical applications. She is a life member in the various professional bodies of India, such as the Indian Association of Nuclear Chemists and Allied Scientists, Indian Nuclear Society, Society of Nuclear Medicine-India, National Association for Applications of Radioisotopes and Radiation in Industry and Indian Association of Material Chemistry.