Summarized CV of Dr. Roberto Suárez Antola July 2021

Roberto Suárez Antola is a generalist scientist with work experience in biology, medicine, and engineering.

1. Training:

-Doctor in Biological Sciences (Mathematical Biophysics) by University of the Republic (UDELAR), Magister in Biological Sciences (Biophysical Physiology, UDELAR), Postgraduate Degree in Nuclear Engineering (University of Buenos Aires) and Bachelor of Physics (UDELAR). Besides, he received medical training (four years of medical school, UDELAR)

-Trained as a public manager through the Management Training Program of the Office of Planning and Budget of Uruguay.

-He made deepening studies in applied sciences and engineering in Argentina, Austria, Brazil, England, France, Germany, Spain, and USA.

-Besides, he studied music and plastic arts.

2. Professional activity:

2.1 Teaching and teaching management:

- Between March of 1990 and April of 2015 was professor in the Catholic University of Uruguay (UCU). He served as associate professor of applied mathematics, mathematical modeling, and digital simulation, and as a full professor of engineering sciences and epistemology. Between 2004 and 2006 he headed the Department of Electrical Engineering at UCU. During 1995 and 1996 he designed the engineering curriculum in electronics and between 1997 and 2004 he directed the electric engineering careers in the School of Engineering at UCU.

-Since 1986, as an official of Uruguay's Ministry of Industry, Energy and Mining (MIEM), he has been contributing to the training of advanced students and professionals in topics related to ionizing radiations and radiobiology, non-destructive testing and materials science, tracers and mass transport processes in hydrology, industry and environment, metrology, mathematical models and digital simulation of systems.

- Between March of 1973 and March of 1985 was professor in the Schools of Medicine, Engineering, Chemistry, Humanities and Sciences at UDELAR. He served as assistant professor, associate professor, full professor, and department director (area of physical-mathematical sciences). He designed the curriculum and directed the Bachelor of Science in Physical-Mathematical Sciences. He coordinated an OAS project (installation of a vibration and ultrasound laboratory) and a UNESCO subproject in Uruguay (application of mathematical models in marine sciences).

2.2 Advice and management at the public level:

- From 1999 to 2020 he was Advisor at MIEM.
- From 1989 to 1998, he led the Promotion and Development Division (which included the laboratories) of the former National Directorate of Nuclear Technology of MIEM.
- He joined MIEM in December 1985, as a physicist, in the National Atomic Energy Commission.
- Between 1992 and 2013 he coordinated five national cooperation projects with the UN International Atomic Energy Agency (IAEA) and four ARCAL projects.
- Served as advisor of the National Council of Innovation Science and Technology and integrated this council in representation of UDELAR.

2.3 Consultancy, research, and management activities in private companies:

-Worked as an IAEA expert in non-destructive testing, fracture mechanics and tracer technology applied to industry, civil works, environment, and hydrology.

-Has given courses, conferences or technical presentations in Argentina, Austria, Brazil, Dominican Republic, England, France, Germany, Jamaica, Jordan, Malaysia, Paraguay, USA, Spain, and Venezuela.

-Between 1975 and the present time he carried out more than 150 works, including published research in subjects of basic sciences, medicine and engineering, professional works of consultancy for state institutions and private companies in Uruguay and abroad, and books as author or co-author. He integrated committees for the drafting of technical standards. He serves as reviewed and member of the advisory board of research journals and international congresses and integrates the national system of scientific researchers of Uruguay. He is Academic Member of the Athens Institute for Education and Research (integrating the Research Units in Philosophy and in Physics).

-He was Managing Director of AMBIO SRL (1997-2001). Since 2016, he serves as Technical Director of OMNIA. Since 2021 he is dedicated to private practice in the areas in which he has specialized.

3. Awards and patents:

-National Medicine Award (1985, shared). Award-winning work: Book *Cardiac pacemakers*.

-National Patent No. 12817 (1987, shared) Electrode for electrical stimulation of biological tissues.

-Genesis Award (MIEM, 1990, shared). Award-winning work: *Electrode for electrical stimulation of biological tissues*

-Prize of the National Academy of Engineering (2004, shared). Award-winning work: *Optimal threshold pulse shapes for electrical stimulation of biological tissues: study from an engineering perspective and development of equipment to produce them*.

Additional information in personal page: https://www.researchgate.net/profile/Roberto_Suarez-Antola/?ev=hdr_xprf