

Curriculum Vitae - Gustavo Haquin

Have 18 years of professional experience in Nuclear Physics and Radiation Protection in the Israel's nuclear research field. Since 2010 serving as the Head of the Radiation Safety Department (RSD) at the Soreq Nuclear Research Centre (SNRC).

Established and managed laboratories such as the Israel Nuclear Forensic Laboratory, the Israel Radionuclide Laboratory (ILL09) supporting the International Monitoring System (IMS) of the Comprehensive Test Ban Treaty Organization (CTBTO), the radioactivity measurement laboratory at SNC having knowledge and experience in the technical aspects of detecting nuclear fission and activation, characterization of nuclear and radioactive materials, risk assessment of natural radioactivity and the use of natural and anthropogenic radioactivity as environmental tracer.

Expert in radiation protection, recently appointed by IAEA DDG on Nuclear Safety & Security, as an external expert for the preparation of the Fukushima Comprehensive Report. Part of task group 4 responsible for the description of the radiological consequences of the Fukushima Dai-ichi Nuclear Power Plant accident.

Took part of several professional committees for the preparation of National regulations and standard as the drinking water regulation, natural radioactive elements in building materials, IAEA radiation protection standard, etc...

President of the Israel Society for Radiation Protection and member of the Organizing committee of the 27th Conference of the Israel Nuclear Societies.

Education

1991 B.Sc. in Physics, The Hebrew University, Jerusalem, ISRAEL.

1995 M.Sc. in Biomedical Engineering, Ben-Gurion University of the Negev, Beer-Sheva, ISRAEL.

Thesis: Dosimetry of Small and Irregular Electron Fields in Radiotherapy. Advisor: Prof. A. Kushilevsky

Ph.D. in Nuclear Engineering, Ben-Gurion University of the Negev, Beer-Sheva, ISRAEL.

Thesis: Effect of the Temperature on Radon Transport in Underground Geological Porous Media. Advisor: Prof. A. Alfassi and Prof. N. Weisbrod

Employment History

Israel Atomic Energy Commission, Soreq Nuclear Research Center

2010 - Head, Radiation Safety Department (RSD), Applied Technology Division
Responsible for all the radiation protection R&D in the SNRC
Responsible for the National School for Radiation Protection
Senior adviser to the National Licensing and Safety Office in the field of radiation safety
Senior adviser to the Israel Atomic Energy Commission in the field of verification techniques to the CTBT and nuclear forensics

- Integragt of the Israeli team on the bilateral dialogue DOE-IAEC in the field of nuclear forensics
- 2005-2010 Head of Radiation Measurements Laboratories, RSD
Management and establishment of ILL09, management of nuclear laboratories
- 2002-2005 Senior researcher, RSD
Leading research on nuclear physics and radiation measurements, environmental radioactivity, occupational health physics, radiation exposure from building materials and public exposure to ionizing radiation
Instructor at the National School for Radiation Protection
- 1998-2002 Researcher in R&D groups, RSD
Research on nuclear physics, environmental radioactivity, therapeutic use of radioactive materials, occupational health physics and public exposure to ionizing radiation
- Ministry of Environmental Protection**
- 1996 – 1998 Researcher, Noise abatement and Radiation Safety Division
Responsible for licensing radon and radiation laboratories
Responsible for environmental monitoring system

Main Areas of Professional Interest

- Radiation Protection
 - R&D, operation and management.
 - Operational health physics
 - Personal dosimetry
 - Biological effect of ionizing radiation
- Nuclear Forensics and nuclear/radiological security
 - Nuclear fission
 - Risk and preparedness for nuclear and radiological terrorism
 - Smuggling of radioactive materials and Special Nuclear Materials (SNM)
 - Radioactive contamination of water reservoirs
- Environmental radioactivity
 - Natural radioactivity in building materials and commodities
 - Radon exposure
 - Natural radioactivity in groundwater and transfer into vegetation
 - Cosmic radiation
- Transport of gases in porous media
 - Radon in geological environment
 - Effect of temperature on radon release and transport in soil