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CURRICULLUM VITAE AND SYNOPSIS OF RESEARCH

Education

2010-2014: **Ph.D**. in Nuclear Engineering at Ben Gurion University of the Negev, Beer Sheva, Israel.
Supervisors: Prof. Zeev B. Alfassi and Dr. Uzi German.
Thesis title: Activity Determination of Beta Particles in Liquid Samples using Cherenkov Counting, by Applying Color Quench Correction.

2004-2005: **M.Sc**. in Nuclear Engineering at Ben Gurion University of the Negev, Beer Sheva, Israel.
Supervisors: Prof. Zeev B. Alfassi and Dr. Uzi German.
Thesis title: Activity Determination of Beta Particles in Liquid Samples using Cherenkov Counting.

2000-2004: **B.Sc**. in Nuclear Engineering at Ben Gurion University of the Negev, Beer Sheva, Israel - **Graduated Magna cum Laude**.
Project title: Locating a Radioactive Source in the Lungs using an Array of Four HPGe Detectors.

Employment

2020 – present: Head of Health Physics Laboratories, Radiation Protection & Safety Department, NRCN-Israel.

2005 – 2020: Head of nuclear spectrometry and counting lab, Radiation Protection & Safety Department, NRCN-Israel.

1994 – 2000: Nuclear technician, Nuclear spectrometry and counting lab,

NRCN-Israel.

Professional and Administrative Activities

2020 – present Head of Health Physics Laboratories, Radiation Protection & NRCN-Israel.

2005 – 2020 Head of Spectrometry Laboratory, Radiation Protection & Safety Department, NRCN-Israel.

Awards and Honors

Personal

- Winner of Pazy scholarship as CI with Prof. Yachin Ivry, Technion.
  Research title: "Radiation effects on ferroelectrics: from atomic scale imaging to nanoscale dosimetry", 2020.
- Ph.D. Research breakthrough contributor to the book: Michael F. L'Annunziata, "Handbook of Radioactivity Analysis" 4th ed. V.2, Chapter 6, "Cherenkov Counting", Radioanalytical Applications, 2020.
- NRCN director general award - best Safety award of 2016.
  Prize Title: Leading the development of a new method to measure high energy beta emitting sample by Cherenkov's radiation.
- Best employee award, NRCN Management Excellence, 2011.
- Best employee award, Radiation Protection & Safety Department Management Excellence, 2009.
- Dean's Excellence Award, B.Sc. 4th Year, Nuclear Engineering Dept. (2005).
- Dean's Excellence Award, B.Sc. 3rd Year, Nuclear Engineering Dept. (2004).
- Dean's Excellence Award, B.Sc. 2nd Year, Nuclear Engineering Dept. (2003).

Project - Excellence in European Procorad intercomparison lab tests:

- 2020: No. 1 lab in the world for activity measurement of ^{90}Sr in urine samples.
- 2017: No. 1 lab in the world for activity measurement of ^{90}Sr in urine samples.
  The samples were analyzed by a new Cherenkov counting technique that was developed in my P.hD. thesis.

- 2015: Top 10 process optimization award for batch measurements of gamma emitters in urine samples.
- 2012-2014: Top lab for the measurement of gamma emitters and tritium activity in urine samples.

Process Optimization awards:

- 2008: Safety and reliability optimization of whole body counting system utilizing proximity sensors to prevent undesired patient bed movement.
- 2006 : Connection of aging detector system to new advanced computer system utilizing serial ports.

Academic Activities

2020-2021:	Pazy foundation proposal . Research title: Radiation effects on ferroelectrics: from atomic scale imaging to nanoscale dosimetry.
2015 – 2016:	Sabbatical, Research associate in Physics Department, Ben Gurion University of the Negev. Research title: Development of rapid screening method for gross alpha and beta counting.
2016:	Pazy foundation proposal . Research title: Application of a novel method to assess radionuclide uptake with a whole-body counting system using computational phantoms,.
2013-2016	Research Associate, Hebrew University, Jerusalem. Research title: Study of radioactive tracers in plankton.

Educational Activities

Course lecture

2004- 2018:	Lecturer, Nuclear Spectrometry methods, NRCN, Dimona, Israel.
1996 -1998:	Math teacher in the Industrial School, NRCN, Dimona, Israel.

Research students

2018-2020: Supervisor of M.Sc. student at the Nuclear Engineering Department, Ben-Gurion University of the Negev.
Thesis title: Development of methods to identify α-particle tracks in CR-39 dosimeters.

Memberships/Fellowships

2005 – present: The Israel Society of Radiation Protection.