

Aharon Friedman

February, 2021

BRIEF CURRICULUM VITAE**Personal Details**

Name: Aharon Friedman

Date and place of birth: November 16, 1957 – Tel Aviv

Date of immigration: January 3, 2013 (return)

Regular military service (dates): February 3, 1976 – October 3, 1979

Address and telephone number at work: Ariel University, 03-975-8979

Address and telephone number at home: Mivtsa Dekel 22/74, Petah Tiqwa, 053-770-1314

Education

B.Sc. - 1979 – 1984 – Tel Aviv University – Electrical Engineering

Ph.D. - 1983 – 1987 – Tel Aviv University – Physical Electronics

Avi Gover

Spontaneous and Stimulated Emission from Quasi Free Electrons-A General Formulation

Employment History

2013 – Present: Head - Center for Compact Accelerators and Radiation Sources - Ariel University

2015 – Present: Full Professor – Dept. of Electrical Engineering – Ariel University

2013 – 2019: Founder and Chief Technical Officer - Healthy Chocolate Company, Inc.

A company that manufactures and markets Healthy Chocolate – a weight loss and health functional food.

2008 – 2013: President - Healthy Chocolate Company, Inc.

2005 – 2007: Chief Science Officer - Netrix, Inc.

A company that manufactures and markets functional foods.

2003 – 2005: Founder and CEO - Natura Medical, Inc.

A company developing and marketing diabetes and weight loss products.

1995 – 2002: Founder, Chairman and Chief Technology Officer - Fortress Technologies, Inc.

Corporation specializes in the research, development, and marketing of security technologies (cyber) for the communications industries.

1993 – 1995: Physicist - Brookhaven National Laboratory, National Synchrotron Light Source

1990 – 1993: Associate Physicist - Brookhaven National Laboratory, National Synchrotron Light Source

1989 – 1990: Associate Professor - University of Maryland

1987 – 1990: Senior Research Physicist - Science Applications International Corporation, Applied Physics Group

1985 – 1987: Research Collaborator (Post Doc) - Brookhaven National Laboratory, National Synchrotron Light Source

1982 – 1985: Research and Teaching Assistant - Tel-Aviv University, Faculty of Engineering

1983 – 1984: Lecturer - Tel-Aviv University, School of Technical Engineers

Awards, Citations, Honors, FellowshipsHonors, Citation Awards (including during studies)

2009 – Manatee County Chamber of Commerce – Twenty-Five People to Watch

1988 – SAIC – SAIC Publication Award for Physics

1987 – American Optical Society – Laser Focus Award

1983 – Goitwird Foundation – Goitwird Award Fellowships

1985 – Fulbright Foundation – \$12,000 – Post Doctoral Fellowship

Synopsis of Research

My research concentrate in several areas:

1. Accelerator Physics
2. Free Electron Lasers
3. Quantum Optics
4. Artificial Intelligence Based Control
5. Signal Detection and Processing
6. Unstructured grid and computational fluid dynamics
7. Non-linear image processing
8. Computer and Communications Security
9. Diabetes

Research in progress

Subject: Tera Hertz Free Electron Laser

Other participants: Avi Gover, Egor Dyunin, Vladimir Bratman, Asher Yahalom, Yuri Lurie, Moshe Einat, Amir Abramovitz, Yehiel Vashdi, Eli Farber, James Rosenzweig, Ariel Nause, Engineers, Students

Expected date of completion: End of 2021

Subject: Fast Spectrum Measurements

Other participants: Dan Meirshtein, Tomer Zidky

Expected date of completion: Open Ended

Subject: Fast Tera Hertz Electro-Optical Detector

Other participants: Paul Ben Ishai

Expected date of completion: June 2021

Subject: FEL Theory

Other participants: Avi Gover, Reuven Yantuchenko, Claudio Pellegrini, Claudio Ema

Expected date of completion: Open Ended

Subject: Free Electron Bound Electron Interaction

Other participants: Avi Gover, Reuven Yantuchenko, Scheuer

Expected date of completion: Open Ended

Major Achievements

- Led the IEEE effort to develop the security part of the 802.11 (Wi Fi) protocol that is in use today.
- Wrote FIPS 140-2 which is the standard for communication devices used by the US, UK, Canada, Sweden, UK, and other governments.
- Helped develop and implement government regulations and legislation on encryption export as set by the US Congress.
- Designed and helped implement networks for several municipalities in Florida.
- Participated in the Florida Governor's high technology development forum.
- Founded Fortress Technologies and developed it to be a technology leader in the field of Computer and Network Security.
- Built the largest distributed control system in the world at the time. Supervised a team of over 50 scientists and engineers and completed the project on time and on budget.
- Developed a method for controlling particle accelerators, which is now used in every accelerator facility in the world.
- Fulbright Fellow and member of the Fulbright Academy of Science.
- Ph.D. thesis was published in full in the journal "Reviews of Modern Physics" which is the most prestigious publication of the American Physical Society – publishing by invitation only.
- Developed a manufacturing procedure for Bell Apollo that cut their labor cost per unit by almost 50% and increased the product output by more than 100%.

- Owns several US and International patents in various fields.
- Developed a natural Weight Loss system, including a weight loss chocolate that is healthy and tasty and a group of supplements that are easy and safe to take for all ages.
- Developed a natural remedy for Diabetes and Weight loss treated himself as well as several other severe diabetics successfully. Wrote a book about weight loss, which is about to be published.