Inbal Gavish Segev

Material scientist

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Education

2015–2019 **Ph.D. in Material Engineering, Ben-Gurion University, Israel.**
Thesis: "Protons radiation damage in Tungsten", Supervised by Prof. G. Makov, Dr. E. Yahel, Dr. I. Silverman.

2006–2009 **M.S.c in Material Engineering, Technion, Israel.**
Thesis: "Nanostructruring carbon films deposited by energetic species produced by a Filtered Cathodic Vacuum Arc (FCVA) source", Supervised by Prof. Y. Lifshitz, Prof. R. Kalish.

2001–2005 **B.Sc. in Material Engineering, Technion, Israel**
B.A. in chemistry, Technion, Israel

Experience

2008–present **Researcher at** Soreq Nuclear Research Center, Yavne, Israel.

2012-2019 Material scientist at SARAF at SARAF (Soreq Applied Research Accelerator Facility) department. I have worked at different projects, mainly focused on research of radiation damage of accelerator structural materials, corrosion of liquid metals and ceramic windows.
Neutron characterization of functional materials using diffraction and imaging techniques. Diffraction experiments and neutron transmission simulations, development and manufacturing of perovskites while establishing international scientific collaboration with leading facilities.
2008-2012 Material scientist at Material &Technology department. I've worked and gained skills at high vacuum systems, R&D of sputtering and complex bonding processes.

2018-2019 Co-Advisor to master degree students and final project first degree student, on radiation damage in tungsten and tantalum, experimental and theoretical research (radiation damage modeling).

2007-2008 Teaching assistant,
In Ceramics course for 3rd year material engineers,
In Composite material course for 4th year material engineers
Technion, Israel institute of Technology, Haifa, Israel.

2005-2006 Composite materials Developer, material engineer, RAFAEL, Israel.

Honors and Prizes

2010-2016	Katzir 6-year scholarship for promising Israeli scientists.
2012	Excellence employee award of Technology department for year 2012, Soreq.
2012	Excellence team award for year 2012, Soreq
2009	**summa cum laude** award for excellence in Master Degree, Material science faculty, Technion, Israel institute of Technology, Israel.
2008	Prof. Rozen Excellency scholarship in research and teaching for year 2008, Technion, Israel institute of Technology, Israel.
2008	Russel Berrie Excellency scholarship in Nano-science and Nanotechnology research, Technion, Israel institute of Technology, Israel.
2007	Russel Berrie Excellency scholarship in Nano-science and Nanotechnology research, Technion, Israel institute of Technology, Israel.
2005	Best final project award, Material science faculty, Technion, Israel institute of Technology, Israel.

Patent

2008	Nano-structuring Carbon Films Deposited by Energetic Species

Publications

Peer-review Publications

- I. Gavish Segev, E. Yahel, I. Silverman, M. Cohen, G. Makov, "Fracture morphology and mechanical properties study of poly and single crystal tungsten blisters obtained by MeV protons" Journal of Nuclear Materials 525 (2019) 40-47.
- I. Gavish Segev, E. Yahel, I. Silverman, A. Perry, L. Weismann, G. Makov, "Hydrogen blister formation in single crystal and polycrystalline tungsten irradiated by MeV protons" Journal of Nuclear Materials 513 (2019) 209-220.
- I. Mardor, *et al.*, I. Gavish Segev, "The Soreq Applied Research Accelerator Facility (SARAF): Overview, research programs and future plans", The European Physical Journal A, 54 (2018) 91.
- A. Arenshtem *et al*. I. Gavish, "Testing of SARAF tungsten pin beam dump" Journal of instrumentation, 13 (2018) T01008.

- I. Silverman *et al.*, I. Gavish Segev, "Scientific opportunities at SARAF with liquid lithium jet target neutron source" AIP conference Proceedings 1962, (2018) 020002.
- I. Gavish Segev, E. Yahel, I. Silverman, G. Makov, "Blister formation at subcritical doses in tungsten irradiated by MeV protons" Journal of Nuclear Materials 496 (2017) 77-84.
- I. Silverman *et al.*, I. Gavish Segev, "SS316L as window for production target for Ge-68" 11th International Topical Meeting on Nuclear Applications of Accelerators, AccApp 2013, (2013) 226–230.