

Curriculum Vitae

Academic Background:

2005-2009 Bar – Ilan University, Department of Chemistry. Ph.D. Chemistry with concentration in Polymers and materials Chemistry
2003-2005 Bar – Ilan University, Department of Chemistry. M.Sc Chemistry with concentration in Polymers and materials Chemistry
2000-2003 Bar – Ilan University, Department of Chemistry. B.Sc Chemistry with concentration in Organic & Medicinal Chemistry
1998-2000 I.D.F. manpower cordinator at Police military corps.

Professional Background:

2011-now Bar – Ilan University, Department of Chemistry
Dr. Daniel Nessim lab, Post doctorate position in Material Science and lab manager.
Research experience in CNTs CNF, diamond and graphene synthesis by CVD and wet chemistry and characterization
Methods: CVD, HRSEM, HRTEM, RAMAN, XPS, ALD, AFM, e-beam evaporation. Experience with batteries, supercapacitors and fuel cells.

2010-2011 Bar – Ilan University, Department of Chemistry
Prof. Lellouch lab, Post doctorate position in Material Science.
Research experience in organic synthesis, gold surface modification and piezoelectric crystal electrodes.
Methods: contact angle, ellipsometry, grazing angle and QCM.

2003-2009 Bar – Ilan University, Department of Chemistry. Research experience in organic synthesis and analysis, polymers synthesis and glass surface modification.
Methods: HPLC, GPC, NMR, FT-IR, XRD, raman , AFM, SEM, viscosity, DSC, light scattering, UV and polarimeter

Awards and scholarships:

24/09/2007 Nano- Technology Center, Department of Chemistry, Bar – Ilan University.
Scholarship for outstanding students
30/01/2005- 12/03/2005 German - Israeli Water Technology Program grant. Young scientists exchange program. German-Israeli Cooperation in Water Technology Research.
Organic Chemistry III / Macromolecular Chemistry, University of Ulm, Germany

Teaching experience (during B.Sc.):

2004-2009 Physical Chemistry Lab course at the Bar – Ilan University

Publications:

- 1) Rivka Ben Ishaya, Yaara Kapp-Barneaa, Irena Grigorianza, Eti Teblum, Jean-Paul Lellouche: Real time acoustic profiling of a live cancerous cell monolayer using QCM, Sensors and Actuators B, 2015, 215, 373–381.
- 2) Palaniappan Subramanian, Asaf Cohen, Eti Teblum, Gilbert D. Nessimb, Edward Bormashko, Alex Schechter: Electrocatalytic activity of nitrogen plasma treated vertically aligned carbon nanotube carpets towards oxygen reduction reaction, Electrochemistry Communications, 2014, 49, 42-46.
- 3) Eti Teblum, Malachi Noked, Judith Grinblat, Anna Kremen, Merav Muallem, Yafit Fleger, Yaakov R. Tischler, Doron Aurbach and Gilbert D. Nessim: Millimeter-Tall Carpets of Vertically

Aligned Crystalline Carbon Nanotubes Synthesized on Copper Substrates for Electrical Applications, *J. Phys. Chem. C* 2014, 118, 19345–19355.

- 4) Eti Teblum, Yossi Gofer, Cary. L. Pint and Gilbert D. Nessim: Decrypting the role of catalyst oxidation state in synthesis of vertically aligned carbon nanotubes, *J. Phys. Chem. C* 2012, 116, 24522–24528.
- 5) Eti Baruch-Teblum Yizhak Mastai and Katharina Landfester: Miniemulsion polymerization of cyclodextrin nanospheres for water purification from organic pollutants, *European polymer journal*, 2010, 46, 1671–1678.
- 6) Eti Baruch, Anatoly M. Belostotskii and Yitzhak Mastai: Relationship between the antifreeze activities and the chemical structures of polyols. *Journal of Molecular Structure*, 2008, 874, 170-177.
- 7) Eti Baruch, Yitzhak. Mastai: Antifreeze Properties of Polyglycidol Block Copolymers, *macromolecular rapid communication*, 2007, 28, 2256-2261.

Abstracts, Posters and lectures:

1. Eti Teblum, Malachi Noked, Judith Grinblat, Anna Kremen, Merav Muallem, Yafit Fleger, Yaakov R. Tischler, Doron Aurbach, and Gilbert D. Nessim*
Millimeter-tall carpets of vertically aligned crystalline carbon nanotubes synthesized on copper substrates for electrical applications
32nd IVS (Israel Vacuum Society) Annual Conference and Technical Workshop program (IVS), September 8, 2014, Air Force House, Herzlia
2. E. Teblum, M. Noked, A. Kremen, M. Muallem, Y. Tischler, D. Aurbach, and G.D. Nessim: Millimeter-tall carpets of vertically aligned crystalline carbon nanotubes synthesized on copper substrates for electrical applications. Nano-Israel conference, Tel-Aviv, Israel, 2014.
3. E. Teblum, M. Noked, A. Kremen, M. Muallem, Y. Tischler, D. Aurbach, and G.D. Nessim: Millimeter-tall carpets of vertically aligned crystalline carbon nanotubes synthesized on copper substrates for electrical applications. The 16th Israel Materials Engineering Conference (IMEC-16), Technion, Haifa, Israel, 2014.
4. E. Teblum, M. Noked, A. Kremen, M. Muallem, Y. Tischler, D. Aurbach, and G.D. Nessim: Millimeter-tall carpets of vertically aligned crystalline carbon nanotubes synthesized on copper substrates for electrical applications. MRS Fall conference 2013, December 4, 2013, Boston.
5. E. Teblum, M. Noked, A. Kremen, M. Muallem, Y. Tischler, D. Aurbach, and G.D. Nessim: Millimeter-tall carpets of vertically aligned crystalline carbon nanotubes synthesized on copper substrates for electrical applications. 31nd Annual meeting of the Israel Vacuum Society conference, Herzliya, Israel, 2013.
6. Eti Teblum, Yossi Gofer, Cary. L. Pint and Gilbert D. Nessim: Decrypting the role of catalyst oxidation state in synthesis of vertically aligned carbon nanotubes. Nano-Israel conference, Tel-Aviv, Israel, 2012.
7. Eti Baruch-Teblum and Yizhak Mastai: Antifreeze Properties of Polyglycidol Block copolymers. Israel polymers and plastics society, Ben-Gorion airport city, Israel, 2007.
8. Eti Baruch, Anatoly M. Belostotskii and Yizhak Mastai: Relationship between the antifreeze activities and the chemical structures of polyols. The Taiwan-Israel Binational Meeting. Jerusalem, Israel, 2007.
9. Eti Baruch and Yizhak Mastai: Nanoporous Polymers for Water Purification. 71th Meeting of Israeli Chemistry Society. Tel-Aviv, Israel, 2006.