

Curriculum Vitae

Department of Chemical-Engineering, Faculty of Engineering Sciences
& the Ilze Katz Institute for Nanoscience and Technology,
Ben-Gurion University of the Negev (BGU),
Beer-Sheva 84105, Israel
Phone (office): +972-8-646-1489
Email: berkovir@bgu.ac.il

Personal Details

Date of Birth 5 March 1975, Israel
Marital Status Married, three children
Citizenship Israeli citizen

Education

2005 – 2010 **Ph.D., Chemical Physics**, Tel-Aviv University, Israel.
Advisors: Prof. Joseph (Yossi) Klafter & Prof. Michael Urbakh.
Thesis Title: "*From Force Spectroscopy to Diffusion: Single-Molecule vs. Ensemble*"
1998 – 2002 **B.Sc., Chemical Engineering**, Technion, Israel Institute of Technology, Israel.

Professional experience

2013 – Present **Senior-Lecturer (Assistant-Professor)**,
Department of Chemical-Engineering, Faculty of Engineering Sciences,
Ben-Gurion University of the Negev, Beer-Sheva, Israel.
2010 – 2013 **Postdoctoral Research Fellow**,
Columbia University, NY, USA.
2001 – 2006 **IMI LTD**, Israel.
- **Head of Department**, Crystallization and Coating Department.
- **Process Engineer**.

Awards and Honors

2018 – Present Incumbent of the Joseph and May Winston Career Development Chair in Chemical Engineering.
2015 – 2018 Incumbent of the Elaine S. and Alvin Wene Career Development Chair in Biotechnology Engineering.
2009 Joint ICTP-FANAS Conference on Trends in Nanotribology, conference award "Best Young Researcher Presentation".
2007 Tel-Aviv University, Dean's award for outstanding students.

Current Research Interests

- *Atomic friction force microscopy (Nanotribology).*
- *Nonequilibrium statistical mechanics.*
- *Nanoindentation and nanoscale contact mechanics.*
- *Single molecule force spectroscopy (Biophysics).*
- *Understanding and modeling the underlying mechanisms of near-wall effects under shear flow.*

Educational Activities

Courses taught:

- *Introduction to Random Processes and Nonequilibrium Thermodynamics, Graduate level, Ben-Gurion University.*
- *Advanced Thermodynamics, Graduate level, Ben-Gurion University.*
- *Principles in Chemical-Engineering I, (Fluid-Mechanics/Momentum transfer), Undergraduate level, Ben-Gurion University.*
- *Introduction to Numerical Analysis, Undergraduate level, Ben-Gurion University.*
- *Laboratory (II) in Chemical-Engineering, Undergraduate level, Ben-Gurion University.*

Activities as Academic Referee

- Referee for the following scientific journals: *Proceedings of the National Academy of Sciences of the United States of America, Physical Review Letters, Journal of the American Chemical Society, Journal of Physical Chemistry, Physical Review E, Tribology Letters, Physica A, Colloids and Surfaces B: Biointerfaces, PLoS ONE and Langmuir.*

Other Scientific Activities

2016 Chairman of the Annual meeting of the Israeli Institute for Chemical Engineers (IChE 2016)

Conferences and Seminars

- 20 conference presentations in Czech Republic, Germany, Greece, Israel, Italy, Romania and USA.
- 19 invited university seminars in Czech Republic, Israel, Spain and USA.