

CURRICULUM VITAE

• **Personal Details**

Name: **Gonen Ashkenasy**

Address and telephone number at work:

Ben Gurion University, Beer Sheva, Israel;
+972-8-6461637 (office), +972-8-6472189 (lab).

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• **Education**

B.Sc. (1991-1994)

Technion, Haifa, Israel. Chemistry, summa cum laude.

M.Sc. (1994 – 1996)

Weizmann Institute, Rehovot, Israel. Department of Organic Chemistry.

Name of advisor: Prof. Abraham Shanzer.

Title of thesis: Metalloporphyrins as Components of Functional Assemblies.

Ph.D. (1997 – 2001)

Weizmann Institute, Rehovot, Israel. Department of Organic Chemistry.

Name of advisor: Prof. Abraham Shanzer.

Title of thesis: Functional Assemblies: Metalloporphyrins as Components of Structure-Function Model.

• **Employment History**

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| 7/ 2015 | Professor of Chemistry, Department of Chemistry, Ben Gurion University. |
| 2011 – 2015 | Associate Professor, Department of Chemistry, Ben Gurion University. |
| 2006 – 2011 | Senior lecturer, Department of Chemistry, Ben Gurion University. |
| 2005 – 2006 | Visiting scientist, Department of Chemistry, The Scripps Research Institute, La Jolla, USA. |
| 2001 – 2005 | Research associate, Department of Chemistry, The Scripps Research Institute, La Jolla, USA. |
| 1998 - 2001 | Principal lecturer, Biochemistry course, The College of Management, Tel-Aviv, Israel. |
| 1996 - 2001 | Teaching assistant, Organic Chemistry course, The Faculty of Agriculture, Hebrew University, Rehovot, Israel. |

• **Professional Activities**

(a) Positions in academic administration (Departmental, Faculty and University)

1. Member of BGU Rector Committee for acceptance of new faculty (2013 –).
2. Founder and chair of the "Edmond J. Safra Center for the Design and Engineering of Biopolymers", Ben Gurion University (2007 –).
3. Member of the Faculty of Natural Sciences committee (2012-2014).
4. Member of the Chemistry Department committee (2010-2012).

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5. Head of the Chemistry Department graduate studies committee (2008 – 2011).
6. Member of the university senate – representing the Faculty of Natural Sciences senior lecturers (2010).
7. Member of the Ben Gurion University committee for improving and upgrading the graduate studies (2009).

(b) Professional functions outside universities/institutions (inter-university, national, international)

1. Chair of the Israel Society for Astrobiology and the Study of the Origin of Life (Ilasol; 2013 –).
2. Member of the managing committee and Vice-chair (2013 –) of the COST action on Emergence and Evolution of Complex Chemical Systems CM1304.
3. Member of the managing committee (2008 – 2012) and Vice-chair (2010 – 2012) of the COST action on Systems Chemistry CM0703.

• Awards, Citations, Honors, Fellowships

(a) Honors, Citation Awards (including during studies)

1. Ben Gurion, Faculty of Natural Sciences, Excellent Scientist merit award, 2013.
2. Ben Gurion, Faculty of Natural Sciences, Excellent Scientist merit award, 2011.
3. Human Frontier Science Program (HFSP) Career Development Award for young scientists, 2006 – 2008.
4. Kennedy prize for excellent Ph.D. academic and scientific achievements, Rehovot, 2001.
5. Wolf prize for excellent graduate students, Jerusalem, 2000.
6. The Feinberg Graduate School, Weizmann Institute of Science, distinguished fellowship for academic and scientific achievements, Rehovot, 2000.
7. Aharon Katzir student travel fellowship, Rehovot, 2000.
8. Institutional president awards for each academic year (1991 –1993) and for B.Sc. degree (1994), Technion, Haifa.

(b) Fellowships

1. Human Frontier Science Program (HFSP) Long Term Fellowship award for post-doctoral training, 2002 –2005.
2. Rothschild fellowship award for post-doctoral training, 2001.
3. Fulbright fellowship award for post-doctoral training, 2001.

• Selected Research Grants

1. Israel-Germany collaboration (DIP) grant 2013-2018 (together with an Israeli and two German partners).
2. Marie Curie International Training Network (ITN-READ) 2011-2015.
3. European Research Council (ERC) starting grants “Systems Chemistry from Bottom Up: Switching, Gating and Oscillations in Non Enzymatic Peptide Networks”, 2010-2015.
4. Israel Science Foundation (ISF) "Functional Motifs in Synthetic Peptide networks", 2008-2011.
5. US-Israel Binational (BSF) Startup Grant (with Prof. Yitzhak Tor, UCSD, CA, USA) "Dynamic Combinatorial Libraries of Artificial Double-stranded RNA Binding Proteins", 2007-2008.
6. German Israeli Foundation (GIF), Young Scientists Grant "Hybrid Self-assembled β -Peptide

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Catalysts", 2007.

7. Safra Philanthropic Foundation, grant for establishing the "Center for the design and engineering of biopolymers", 2007-09.
8. Human Frontier Science Program (HFSP), Career Development Award for young scientists, 2006 – 08.

Selected Invited and Plenary Lectures at Conferences and Meetings

- **G. Ashkenasy** "Systems Chemistry: Mimicking Cellular Functions Using Small Peptide Networks", Nanotechnology Meets Life Science - From Trends to Application, Frankfurt, Germany, 9-15.
- **G. Ashkenasy** "Complex and Simple Functions in Peptide Networks" Emergence in Chemical System 4.0, Anchorage, Alaska, 6-15.
- **G. Ashkenasy** "Mimicking Complex Cellular Functions using Synthetic Replication Networks", SysChem 2015, Holland, 5-15.
- **G. Ashkenasy** "The Systems Chemistry of Peptide Networks: Replication of High-Order Synthetic Assemblies", Emergence and Evolution of Complex Chemical Systems meeting San-Sebastian, Spain, 6-14.
- **G. Ashkenasy**, B. Rubinov, D. Ivnitiski "Self-Synthesizing Materials Made of Peptide fibrils", Supramolecular Chemistry in Water meeting, Malta 11-13.
- **G. Ashkenasy**, Z. Dadon, M. Samiappan "Dynamic Replication Networks Driven by Thiodepsipeptides", Systems Chemistry Centre meeting, Groningen, Holland, 9-13.
- **G. Ashkenasy**, N. Wagner, S. Alasibi, B. Rubinov "The Systems Chemistry of Peptide Networks" ISMSC meeting Arlington, VA, USA, 7-13.
- **G. Ashkenasy** "Transient Supramolecular Structures Driving Peptide Self Organization and Replication" MRS meeting, San Francisco, CA, USA, 3-13.
- **G. Ashkenasy**, N. Wagner, B. Rubinov "The Systems Chemistry of Peptide Networks Driven by Molecular and Supramolecular Replication" Israel Chemical Society meeting, Tel Aviv 2-13.
- **G. Ashkenasy**, Z. Dadon, B. Rubinov "The Systems Chemistry of Peptide Networks" Nanopeptide 2012, Manchester, UK, 11-12.
- **G. Ashkenasy**, B. Rubinov "Transient Supramolecular Structures Facilitating non-Enzymatic Self-Replication" ICPOC meeting Durham, UK, 9-12. (invited lecturer and session chair)
- **G. Ashkenasy** "Building Logic into Peptide Networks: Bottom-Up and Top-Down" MSMLG meeting, Seoul, Korea, 7-12.
- **G. Ashkenasy** "Self-assembly driven self-replication of amphiphilic peptides" Gordon Research Conference on Peptides Chemistry and Biology, Ventura, CA, USA, 2-12.
- **G. Ashkenasy**, Z. Dadon, S. Alasibi, N. Wagner "Peptide Replication Networks" Gordon Research Conference on the Origin of Life, Galveston, TX, USA, 1-12.
- **G. Ashkenasy**, B. Rubinov, Z. Dadon "Kinetic Supramolecular Traps Driving Replication Networks" Supramolecular Chemistry in Water (COST CM1005 meeting), Rome, Italy, 11-11.
- **G. Ashkenasy**, Z. Dadon, B. Rubinov, N. Wagner "The Inherent Complexity of Simple Molecular Networks" Chembiogenesis meeting, Crete, Greece, 10-11.
- **G. Ashkenasy** "Replication Networks made of α -Helix and β -Sheet Peptides" EMG meeting, Rome Italy, 10-11.

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- **G. Ashkenasy**, B. Rubinov, N. Wagner “Self-Replicating β -sheet Peptides” Origins-2011, Montpellier, France 7-11.
- **G. Ashkenasy**, B. Rubinov, E. Shepelevski “Self-Assembly and Self Replication of Synthetic β -sheet Peptides” Israel Med. Chem. Society meeting, Rehovot, 3-11.
- **G. Ashkenasy** “Replication Networks made of alpha-Helix and beta-Sheet Peptides” Ilanit meeting, Eilat, 2-11.
- **G. Ashkenasy**, Z. Dadon and N. Wagner “Light Induced Replication and Selection in Peptide Networks” Alife 12 meeting, Odense, Denmark, 08-10.
- **G. Ashkenasy** (discussion leader), “Current State of Template-Directed Non-Enzymatic Replication”, Self-organization satellite work shop at Alife 12 meeting, Odense, Denmark, 08-10.
- **G. Ashkenasy**, B. Rubinov, N. Wagner "Self-Replication: alpha-Helix Vs. beta-Sheet Peptides" Israel Chemical Society meeting, Tel Aviv 02-10.
- **G. Ashkenasy**, Z. Dadon, M. Samiappan, N. Wagner "Light-induced Replication Governs Network Behavior" COST Chembiogenesis meeting, Balaton Lake, Hungary, 10-09.
- **G. Ashkenasy**, B. Rubinov "Kinetics and Mechanism of β -Sheet Peptide Replication", ESF Systems Chemistry meeting, Balaton Lake, Hungary, 10-09.
- **G. Ashkenasy**, "The Kinetics and Thermodynamics of Self-Organized Peptide Networks" Emergence in Chemical Systems meeting 2.0, Anchorage, AK, USA 06-09.
- **G. Ashkenasy**, "New Peptidic Platforms for Systems Chemistry", COST meeting, Groningen, Holland, 04-09.
- **G. Ashkenasy**, N. Wagner, E. Yishay, Z. Dadon "Functional Modules in Small Networks of Replicating Molecules", ESF Systems Chemistry meeting, Maratea, Italy, 10-08.
- **G. Ashkenasy**, Z. Dadon, N. Wagner "Thermodynamic versus kinetic control in replication processes", COST Chembiogenesis meeting, Maratea, Italy, 10-08.
- **G. Ashkenasy**, "Self-organized Peptide Networks", HFSP Awardees meeting, Brisbane, Australia, 10-07.
- **G. Ashkenasy**, "Boolean Logic Operations within Peptide Networks", COST meeting, Barcelona, Spain, 12-06.