Curriculum Vitae of Haim Weissman

**Personal Details:**

Mailing address: Weizmann Institute of Science

Department of Organic Chemistry

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**Academic Education:**

1998- 2004 Ph.D. in Chemistry. The Weizmann Institute of Science, Rehovot, Israel. Supervisor: **Prof. D. Milstein**

1992-1995 M.Sc. in Chemistry. Technion, Haifa, Israel. Supervisor: **Prof. Amnon Stanger**

1989-1992 B.A. in Chemistry (*cum laude*). Technion, Haifa, Israel

**Professional Experience:**

April 2014-present **Associate Staff Scientist** in the Department of Organic Chemistry, Weizmann Institute of Science, Rehovot, Israel. Principal Investigator: **Prof. B. Rybtchinski**

March 2008-April 2014 **Assistant Staff Scientist** in the Department of Organic Chemistry, Weizmann Institute of Science, Rehovot, Israel. Principal Investigator: **Prof. B. Rybtchinski**

March 2006-March 2008 **Postdoctoral Fellow** in the Department of Organic Chemistry, Weizmann Institute of Science, Rehovot, Israel. Supervisor: **Prof. B. Rybtchinski**

Aug 2003-March 2006 **Postdoctoral Associate** in the Department of Organic Chemistry, University of Illinois at Urbana Champaign. Supervisor: **Prof. J.S. Moore**

**Teaching:**

2009-2018 **Teaching Assistant** in the course “Molecular Photonics” at the Feinberg Graduate School of the Weizmann Institute of Science. (given once in two years)

2012, 2013Guest lectures on “Transmission Electron Microscopy” as part of a graduate student’s course on “Nanochemistry,” Weizmann Institute of Science, Rehovot, Israel.

2000-present Supervision of undergraduate and graduate students. Instruction of visiting scholars.

**Awards and Honors:**

2006-8 Weizmann Institute of Science, Feinberg Graduate School, Dean’s Postdoctoral fellowship

1991 Weizmann Institute of Science, summer student fellowship, “The Kupcinet International Science School”

1990 Technion, Dean Citation for Excellence

Haim Weissman – List of Publications

**Refereed Articles (work after joining Rybtchinski’s group)**

[1] H. Weissman, E. Shirman, T. Ben-Moshe, R. Cohen, G. Leitus, L. J. W. Shimon, B. Rybtchinski

"*Palladium Complexes of Perylene Diimides: Strong Fluorescence Despite Direct Attachment of Late Transition Metals to Organic Dyes*", *Inorg. Chem.* **2007**, *46*, 4790–4792.

[2] J. Baram, E. Shirman, N. Ben-Shitrit, A. Ustinov, H. Weissman, I. Pinkas, S. G. Wolf, B. Rybtchinski

"*Control over Self-Assembly through Reversible Charging of the Aromatic Building Blocks in Photofunctional Supramolecular Fibers*", *J. Am. Chem. Soc.* **2008**, *130*, 14966–14967. **Highlight**: *Angew. Chem. Int. Ed*. **2009**, *48*, 4480.

[3] E. Shirman, A. Ustinov, N. Ben-Shitrit, H. Weissman, M. A. Iron, R. Cohen, B. Rybtchinski

"*Stable Aromatic Dianion in Water*", *J. Phys. Chem. B* **2008**, *112*, 8855–8858.

[4] G. Golubkov, H. Weissman, E. Shirman, S. G. Wolf, I. Pinkas, B. Rybtchinski

"*Economical Design in Noncovalent Nanoscale Synthesis: Diverse Photofunctional Nanostructures Based on a Single Covalent Building Block*", *Angew. Chemie Int. Ed.* **2009**, *48*, 926–930. **Highlight**: *Angew. Chem. Int. Ed*. **2009**, *48*, 4480.

[5] E. Krieg, E. Shirman, H. Weissman, E. Shimoni, S. G. Wolf, I. Pinkas, B. Rybtchinski

"*Supramolecular Gel Based on a Perylene Diimide Dye: Multiple Stimuli Responsiveness, Robustness, and Photofunction*", *J. Am. Chem. Soc.* **2009**, *131*, 14365–14373.

[6] P. P. Neelakandan, Z. Pan, M. Hariharan, Y. Zheng, H. Weissman, B. Rybtchinski, F. D. Lewis

"*Hydrophobic Self-Assembly of a Perylenediimide-Linked DNA Dumbbell into Supramolecular Polymers*", *J. Am. Chem. Soc.* **2010**, *132*, 15808–15813.

[7] G. Santosh, E. Shirman, H. Weissman, E. Shimoni, I. Pinkas, Y. Rudich, B. Rybtchinski

"*Photofunctional Self-Assembled Nanostructures Formed by Perylene Diimide−Gold Nanoparticle Hybrids*", *J. Phys. Chem. B* **2010**, *114*, 14389–14396.

[8] E. Krieg, H. Weissman, E. Shirman, E. Shimoni, B. Rybtchinski

"*A Recyclable Supramolecular Membrane for Size-Selective Separation of Nanoparticles*", *Nat. Nanotechnol.* **2011**, *6*, 141–146. **Highlights:** *Chem. World* **2011**, *8*, 27*; Nature Nanotech. News and Views: Nat. Nanotech.* **2011**, *6*, 136*; American Scientist* **2014**, *102*, 94 (by Roald Hoffman). *Popular media:* ***ynet*** *(Israeli largest news portal), Galileo (popular science journal)*.

[9] Y. Tidhar, H. Weissman, S. G. Wolf, A. Gulino, B. Rybtchinski

"*Pathway-Dependent Self-Assembly of Perylene Diimide/peptide Conjugates in Aqueous Medium*", *Chem. - A Eur. J.* **2011**, *17*, 6068–6075. ***VIP paper***.

[10] A. Ustinov, H. Weissman, E. Shirman, I. Pinkas, X. Zuo, B. Rybtchinski

"*Supramolecular Polymers in Aqueous Medium: Rational Design Based on Directional Hydrophobic Interactions*", *J. Am. Chem. Soc.* **2011**, *133*, 16201–16211.

[11] H. Weissman, A. Ustinov, E. Shimoni, S. R. Cohen, B. Rybtchinski

"*Self-Assembled Two-Dimensional Porous Network in Aqueous Solution Based on Perylene Diimide Phenylacetylene Oligomer*", *Polym. Adv. Technol.* **2011**, *22*, 133–138.

[12] E. Krieg, S. Albeck, H. Weissman, E. Shimoni, B. Rybtchinski

"*Separation, Immobilization, and Biocatalytic Utilization of Proteins by a Supramolecular Membrane*", *PLoS One* **2013**, *8*, e63188.

[13] C. Shahar, J. Baram, Y. Tidhar, H. Weissman, S. R. Cohen, I. Pinkas, B. Rybtchinski

"*Self-Assembly of Light-Harvesting Crystalline Nanosheets in Aqueous Media*", *ACS Nano* **2013**, *7*, 3547–3556.

[14] J. Baram, H. Weissman, B. Rybtchinski

"*Supramolecular Polymer Transformation: A Kinetic Study*", *J. Phys. Chem. B* **2014**, *118*, 12068–12073.

[15] J. Baram, H. Weissman, Y. Tidhar, I. Pinkas, B. Rybtchinski

"*Hydrophobic Self-Assembly Affords Robust Noncovalent Polymer Isomers*", *Angew. Chemie Int. Ed.* **2014**, *53*, 4123–4126.

[16] G. L. Eakins, J. K. Gallaher, R. A. Keyzers, A. Falber, J. E. A. Webb, A. Laos, Y. Tidhar, H. Weissman, B. Rybtchinski, P. Thordarson et al.

"*Thermodynamic Factors Impacting the Peptide-Driven Self-Assembly of Perylene Diimide Nanofibers*", *J. Phys. Chem. B* **2014**, *118*, 8642–8651.

[17] E. Krieg, H. Weissman, E. Shimoni, A. Bar On (Ustinov), B. Rybtchinski

"*Understanding the Effect of Fluorocarbons in Aqueous Supramolecular Polymerization: Ultrastrong Noncovalent Binding and Cooperativity*", *J. Am. Chem. Soc.* **2014**, *136*, 9443–9452.

[18] A. Bar On, Y. Tidhar, I. Pinkas, H. Weissman, B. Rybtchinski

"*Supramolecular Nanofibers Self-Assembled from Foldamers: Structure Control through Preassembly*", *Isr. J. Chem.* **2014**, *54*, 748–758.

[19] Y. Tidhar, E. Edri, H. Weissman, D. Zohar, G. Hodes, D. Cahen, B. Rybtchinski, S. Kirmayer

"*Crystallization of Methyl Ammonium Lead Halide Perovskites: Implications for Photovoltaic Applications*", *J. Am. Chem. Soc.* **2014**, *136*, 13249–13256.

[20] Y. Tidhar, H. Weissman, D. Tworowski, B. Rybtchinski

"*Mechanism of Crystalline Self-Assembly in Aqueous Medium: A Combined Cryo-TEM/Kinetic Study*", *Chem. - A Eur. J.* **2014**, *20*, 10332–10342.

[21] M. D. Tzirakis, M. N. Alberti, H. Weissman, B. Rybtchinski, F. Diederich

"*Enantiopure Laterally Functionalized Alleno-Acetylenic Macrocycles: Synthesis, Chiroptical Properties, and Self-Assembly in Aqueous Media*", *Chem. - A Eur. J.* **2014**, *20*, 16070–16073.

[22] E. Kossoy, H. Weissman, B. Rybtchinski

"*Bending Nanofibers into Nanospirals: Coordination Chemistry as a Tool for Shaping Hydrophobic Assemblies*", *Chem. - A Eur. J.* **2015**, *21*, 166–176.

[23] W. J. Ramsay, F. T. Szczypiński, H. Weissman, T. K. Ronson, M. M. J. Smulders, B. Rybtchinski, J. R. Nitschke

"*Designed Enclosure Enables Guest Binding Within the 4200 Å 3 Cavity of a Self-Assembled Cube*", *Angew. Chemie Int. Ed.* **2015**, *54*, 5636–5640.

[24] S. Rosenne, E. Grinvald, E. Shirman, L. Neeman, S. Dutta, O. Bar-Elli, R. Ben-Zvi, E. Oksenberg, P. Milko, V. Kalchenko et al.

"*Self-Assembled Organic Nanocrystals with Strong Nonlinear Optical Response*", *Nano Lett.* **2015**, *15*, 7232–7237.

[25] Y. Tsarfati, V. Strauss, S. Kuhri, E. Krieg, H. Weissman, E. Shimoni, J. Baram, D. M. Guldi, B. Rybtchinski

"*Dispersing Perylene Diimide/SWCNT Hybrids: Structural Insights at the Molecular Level and Fabricating Advanced Materials*", *J. Am. Chem. Soc.* **2015**, *137*, 7429–7440.

[26] C. Shahar, S. Dutta, H. Weissman, L. J. W. Shimon, H. Ott, B. Rybtchinski

"*Precrystalline Aggregates Enable Control over Organic Crystallization in Solution*", *Angew. Chemie* **2016**, *128*, 187–190.

[27] E. Cohen, H. Weissman, E. Shimoni, I. Kaplan-Ashiri, K. Werle, W. Wohlleben, B. Rybtchinski

"*Robust Aqua Material: A Pressure-Resistant Self-Assembled Membrane for Water Purification*", *Angew. Chemie Int. Ed.* **2017**, *56*, 2203–2207. **Highlights**: ChemViews Magazine [18 January 2017](http://www.chemistryviews.org/details/ezine/10382721/Tough_Aqua_Material_for_Water_Purification.html) and additional ten [science news outlets](https://wiley.altmetric.com/details/15564155/news). **Altmeter score of 100**

[28] A. K. Mishra, H. Weissman, E. Krieg, K. A. Votaw, M. McCullagh, B. Rybtchinski, F. D. Lewis

"*Self-Assembly of Perylenediimide-Single-Strand-DNA Conjugates: Employing Hydrophobic Interactions and DNA Base-Pairing To Create a Diverse Structural Space*", *Chem. - A Eur. J.* **2017**, *23*, 10328–10337. **Hot Paper.**

[29] S. M. Munzert, S. P. Stier, G. Schwarz, H. Weissman, B. Rybtchinski, D. G. Kurth

"*The Kinetics of Growth of Metallo-Supramolecular Polyelectrolytes in Solution*", *Chem. - A Eur. J.* **2018**, DOI 10.1002/chem.201701417. **Hot Paper.** **Highlights**: Two [science news outlets](https://wiley.altmetric.com/details/21569880/news).

[30] E. Cohen, H. Weissman, I. Pinkas, E. Shimoni, P. Rehak, P. Král, B. Rybtchinski

*“Controlled Self-Assembly of Photofunctional Supramolecular Nanotubes”*, *ACS Nano* **2018**. <https://doi.org/10.1021/acsnano.7b06376>.

[31] Y. Tsarfati, S. Rosenne, H. Weissman, L. J. W. Shimon, D. Gur, B. A. Palmer, B. Rybtchinski

“Crystallization of Organic Molecules: Nonclassical Mechanism Revealed by Direct Imaging”, *ACS Cent. Sci.* **2018**. https://doi.org/10.1021/acscentsci.8b00289.

[32] E. Cohen, Y. Soffer, H. Weissman, T. Bendikov, Y. Schilt, U. Raviv, B. Rybtchinski

*“Hydrophobicity Control in Adaptive Crystalline Assemblies”*, *Angew. Chemie* **2018**. https://doi.org/10.1002/ange.201801912.

[33] A. Niazov-Elkan, H. Weissman, S. Dutta, S. R. Cohen, M. A. Iron, I. Pinkas, T. Bendikov, B. Rybtchinski

“*Self-assembled Hybrid Materials Based on Organic Nanocrystals and Carbon Nanotubes*”, *Adv. Mater*. *Adv. Mater.* **2018**, *30* (2), 1705027--n/a. <https://doi.org/10.1002/adma.201705027>.

[34] T. Wolf, A. Niazov-Elkan, X. Sui, H. Weissman, I. Bronshtein, M. Raphael, H. D. Wagner, B. Rybtchinski,

*“Free-Standing Nanocrystalline Materials Assembled from Small Molecules”*, *J. Am. Chem. Soc.* **2018**, *140*, 4761–4764.

[35] A. Niazov-Elkan, X. Sui, I. Kaplan-Ashiri, L. J. W. Shimon, G. Leitus, E. Cohen, H. Weissman, H. D. Wagner, B. Rybtchinski

*“Modular Molecular Nanoplastics”*. *ACS Nano* **2019**, *13* (10), 11097–11106.

[36] I. Bronshtein, H. Weissman, I. Kaplan-Ashiri, B. Rybtchinski

*“Crystallization of Small Organic Molecules in a Polymer Matrix: Multistep Mechanism Enables Structural Control”*, *Small* **2019**. <https://doi.org/10.1002/smll.201902936>.

[37] A. Niazov-Elkan, X. Sui, I. Kaplan-Ashiri, L. J. W. Shimon, G. Leitus, E. Cohen, H. Weissman, H. D. Wagner, B. Rybtchinski

*“Modular Molecular Nanoplastics”*, *ACS Nano* **2019**, *13* (10), 11097–11106. <https://doi.org/10.1021/acsnano.9b03670>.

[38] Q. Zhang, S. R. Cohen, I. Rosenhek-Goldian, D. Amgar, O. Bar-Elli, Y. Tsarfati, T. Bendikov, L. J. W. Shimon, Y. Feldman, M. A. Iron, et al.

*“A Nanoscopic View of Photoinduced Charge Transfer in Organic Nanocrystalline Heterojunctions”,* *J. Phys. Chem. C* **2019**. https://doi.org/10.1021/acs.jpcc.9b04875.

[39] R. B. K. Siram, M. V. Khenkin, A. Niazov-Elkan, K. M. Anoop, H. Weissman, E. A. Katz, I. Visoly-Fisher, B. Rybtchinski

*“Hybrid Organic Nanocrystal/Carbon Nanotube Film Electrodes for Air- and Photo-Stable Perovskite Photovoltaics*”, *Nanoscale* **2019**. <https://doi.org/10.1039/c8nr09353a>.

[40] S. Dutta, X. M. Sui, H. Weissman, V. Kalchenko, H. D. Wagner, B. Rybtchinski

*“Composites of Hydrophilic Polymers and Organic Nanocrystals Enable Enhanced Robustness”*, *Polym. Adv. Technol.* **2019**. <https://doi.org/10.1002/pat.4727>.

**Invited review**

[1] H. Weissman, B. Rybtchinski

"*Noncovalent Self-Assembly in Aqueous Medium: Mechanistic Insights from Time-Resolved Cryogenic Electron Microscopy*", *Curr. Opin. Colloid Interface Sci.* **2012**, *17*, 330–342.

**Refereed Articles (work before joining Rybtchinski’s group)**

[1] A. Stanger, H. Weismann

"*Inter- vs. Intramolecular Rearrangement of a (Bu3P)2Ni Moiety in Its 9-Alkyl and 9,10-Dialkyl Anthracene Complexes. Limiting Conditions and Isomer Stabilities*", *J. Organomet. Chem.* **1996**, *515*, 183–191.

[2] H. Weissman, D. Milstein

"*Highly Active PdII Cyclometallated Imine Catalyst for the Suzuki Reaction*", *Chem. Commun.* **1999**, 1901–1902.

[3] H. Weissman, L. J. W. Shimon, D. Milstein

"*Unsaturated Pd(0), Pd(I), and Pd(II) Complexes of a New Methoxy-Substituted Benzyl Phosphine. Aryl-X (X = Cl, I) Oxidative Addition, C-O Cleavage, and Suzuki-Miyaura Coupling of Aryl Chlorides*", *Organometallics* **2004**, *23*, 3931–3940.

[4] H. Weissman, X. Song, D. Milstein

"*Ru-Catalyzed Oxidative Coupling of Arenes with Olefins Using O2*", *J. Am. Chem. Soc.* **2001**, *123*, 337–338.

[5] H. M. Cho, H. Weissman, S. R. Wilson, J. S. Moore

"*A Mo(VI) Alkylidyne Complex with Polyhedral Oligomeric Silsesquioxane Ligands: Homogeneous Analogue of a Silica-Supported Alkyne Metathesis Catalyst.*", *J. Am. Chem. Soc.* **2006**, *128*, 14742–14743.

[6] H. M. Cho, H. Weissman, J. S. Moore

"*Synthetic Applications with Use of a Silica-Supported Alkyne Metathesis Catalyst.*", *J. Org. Chem.* **2008**, *73*, 4256–4258.

[7] H. Weissman, K. N. Plunkett, J. S. Moore

"*A Highly Active, Heterogeneous Catalyst for Alkyne Metathesis.*", *Angew. Chemie, Int. Ed.* **2006**, *45*, 585–588.

[8] G. O. Wilson, K. A. Porter, H. Weissman, S. R. White, N. R. Sottos, J. S. Moore

"*Stability of Second Generation Grubbs’ Alkylidenes to Primary Amines: Formation of Novel Ruthenium-Amine Complexes.*", *Adv. Synth. Catal.* **2009**, *351*, 1817–1825.

[9] A. D. Finke, E. C. Elleby, M. J. Boyd, H. Weissman, J. S. Moore

"*Zinc Chloride-Promoted Aryl Bromide-Alkyne Cross-Coupling Reactions at Room Temperature*", *J. Org. Chem.* **2009**, *74*, 8897–8900.

**Patents:**

[1] D. Milstein, H. Weissman, X.-P. Song

*“Production of arylalkenes by reaction of arenes with olefins in the presence of ruthenium or osmium catalysts*”, *PCT Int. Appl.* 17 pp. (2002).

[2] H. Weissman, K. N. Plunkett, H. M. Cho, J. S. Moore

*“Heterogeneous alkyne metathesis using molybdenum catalyst and reaction kinetics”,* *U.S. Pat. Appl. Publ.* 17pp. (2006).

[3] B. Rybtchinski, E. Shirman, A. Utstinov, N. Ben-Shitrit, H. Weissman, E. M. Krieg, G. Golubkov, J. Baram

*“Doubly reduced perylene-diimides and supramolecular polymers derived from perylene-diimides”*, *PCT Int. Appl.* 165pp. (2009).

[4] B. Rybtchinski, H. Weissman

“Catalytic reduction of water to produce hydrogen”, *PCT Int. Appl.* 20pp. (2009).

[5] B. Rybtchinski, E. M. Krieg, H. Weissman, S. Albeck, Y. Tidhar

“Separation of nanoparticles using perylene diimide-based membranes”, *PCT Int. Appl.* 109pp. (2012).

[6] B. Rybtchinski, E. M. Krieg, H. Weissman, S. Albeck, Y. Tidhar

*“Self-assembled perylene diimide membranes for separation of nanoparticles”,* *U.S. Pat. Appl. Publ.* 84pp., Cont.-in-part of Appl. No. PCT/IL2011/000687. (2013).

[7] B. Rybtchinski, E. M. Krieg, H. Weissman, S. Albeck, Y. Tldhar, E. Cohen

*“Separation of nanoparticles using self-assembled perylene diimide membranes”*, *U.S. Pat. Appl. Publ.* 92pp., Cont.-in-part of U.S. Ser. No. 636,227. (2015).

[8] B. Rybtchinski, E. Shirman, A. Utstinov, N. Ben-Shitrit, H. Weissman, E. M. Krieg, G. Golubkov, J. Baram

*“Doubly reduced perylene-diimides and supramolecular polymers derived from perylene-diimides”*, *U.S.* No pp. given (2015).

[9] B. Rybtchinski, E. Shirman, A. Utstinov, N. Ben-Shitrit, H. Weissman, E. M. Krieg, G. Golubkov, J. Baram

*“Supramolecular polymers derived from perylenediimides,”* *U.S. Pat. Appl. Publ.* 92pp., Cont.-in-part of U.S. Ser. No. 933,685. (2015).

[10] B. Rybtchinski, E. Cohen, H. Weissman

*“Perylene diimide based membrane and methods of use thereof in filtration system”*, *PCT Int. Appl.* 91pp. (2017).

[11] B. Rybtchinski, H. Weissman, T. Wolf, A. Elkan, S. Dutta, R. B. K. Siram

*“Small molecules based free-​standing films and hybrid materials”*, *PCT Int. Appl.* (2018), WO 2018229765 A1 2018122.

**Invited Seminar lectures:**

1. **Departmental Seminar** talk on “Perylene Diimide Based Nanostructures in Aqueous Solutions – Adaptivity and Diversity.” *The Department for Chemical Sciences, University of Catania, Catania, Sicily, Italy,* July **2009**.
2. **Departmental Seminar** on “Organic Nanostructures: Robustness, Adaptivity and Diversity.” *The Department of Macromolecular Chemistry, Waseda University, Tokyo, Japan*, December **2009**.
3. **Student invited seminar** on “Supramolecular Nanostructures in Aqueous Medium: Noncovalent Construction and Destruction,” *The Department of Chemistry, University of Toronto, Toronto, Canada,* July **2011**.
4. **Departmental Seminar** on “Noncovalent Construction and Destruction of Supramolecular Nanostructures in Aqueous Medium“ *Electron Microscopy Unit, Weizmann Institute of Science, Rehovot, Israel,* March **2012**.
5. **Departmental Seminar** on “Construction and Destruction of Noncovalent Systems in Aqueous Medium” *The Department of Macromolecular Chemistry, Waseda University, Tokyo, Japan*, December **2013**.
6. **Departmental Seminar** on “Construction and Destruction of Noncovalent Systems in Aqueous Medium” *The Department of Macromolecular Chemistry, Tokyo University of Technology – Noda Campus, Noda, Japan*, December **2013**.
7. **Departmental Seminar** on “Self-organization of Noncovalent Systems in Aqueous Medium – Updates on Construction and Destruction“ *Electron Microscopy Unit, Weizmann Institute of Science, Rehovot, Israel,* November **2015**.

**Invited conference lectures:**

1. *The 78th Annual Meeting of the Israel Chemical Society, Tel-Aviv, Israel,* February **2013**, **invited** **talk** on “Construction and Destruction of Noncovalent Systems in Aqueous Medium.”
2. *2015 Collaborative Conference on 3D and Materials Research (CC3DMR)*, Busan, Korea, June **2015**, **invited** **talk** on “Self-Assembly of 1, 2 and 3D Structures - Noncovalent Systems in Aqueous Medium.”
3. *17th IUPAC International Symposium on Macromolecular Complexes (MMC-17), Tokyo, Japan*, August **2017**, **invited** **talk** on “Self-organization of Noncovalent Systems in Aqueous Medium – insights and application.”
4. *2018 Collaborative Conference on Materials Research (CCMR), Incheon, Korea*, June **2018**, **invited** **talk** on “Functional Materials Based on Self-Assembly of Perylene Diimides in Aqueous Media.”

**Contributed talks:**

1. *The Post OMCOS-XI Symposium, Kyoto, Japan,* July **2001**, oral presentation and a poster “Ruthenium Catalyzed Oxidative Coupling of Arenes with Olefins Using Molecular Oxygen.”
2. *The 11th Pacific Polymer Conference, Cairns, QLD, Australia,* December **2009**, oral presentation on “Organic Nanostructures: Robustness, Adaptivity and Diversity.”
3. *The 46th Annual Scientific Meeting of Israel Society for Microscopy, Beer Sheva, Israel,* May **2012**, oral presentation on “Noncovalent Construction and Destruction in Aqueous Medium.”
4. *The 49th Annual Scientific Meeting of Israel Society for Microscopy, Ramat Gan, Israel,* May **2015**, oral presentation on “Self-organization of noncovalent systems in aqueous medium – updates on construction and destruction.”
5. *Microscopy Conference 2015, Göttingen, Germany,* September **2015**, oral presentation on “Self-organization of noncovalent systems in aqueous medium – updates on construction and destruction.”
6. *The 18th International Conference on Crystal Growth and Epitaxy (ICCGE18), Nagoya, Japan*, August **2016** oral presentation on “Dispersing Perylene Diimide/SWCNT Hybrids: Structural Insights at the Molecular Level and Fabricating Advanced Materials.”
7. *The 35th Annual Meeting of the Israel Vacuum Society, Weizmann Institute of Science, Rehovot, Israel*, September **2017**, oral presentation on “Self-organization of Noncovalent Systems in Aqueous Medium – insights and application.”
8. *The 36th Annual Meeting of the Israel Vacuum Society, Weizmann Institute of Science, Rehovot, Israel*, September **2018**, oral presentation on “Water purification and CNT hybrids through Self-Assembly of Perylene Diimides in Aqueous Media.”

**Poster Presentations:**

1. *The 66th Annual Meeting of the Israel Chemical Society, Tel-Aviv, Israel*, February***,*** **2001**, poster on “Ruthenium Catalyzed Oxidative Coupling of Arenes with Olefins Using Molecular Oxygen.”
2. *Minerva Conference on “Advances and Trends in Organic Chemistry”, Rehovot, Israel*, December **2006**, poster on “A Highly Active, Heterogeneous Catalyst for Alkyne Metathesis.”
3. *The 72th Annual Meeting of the Israel Chemical Society, Tel-Aviv, Israel*, February***,*** **2007**, poster on “Connecting Transition Metals to the Aromatic Core of Perylene Diimide Chromophores: Novel Photofunctional Systems with Tunable Properties.”
4. *The 72th Annual Meeting of the Israel Chemical Society, Tel-Aviv, Israel*, February***,*** **2007**, poster on “Highly Practical Palladium Precursor for General Catalysis of Cross-Coupling Reactions.”
5. *The 233rd ACS National Meeting Chicago, IL, USA, March* ***2007***, poster on “Heterogeneous and Homogeneous Mo Catalysts with Silanol Based Ligands for Synthetic Applications of Alkyne Metathesis.”
6. *NanoIsrael2009, the 1st International Nanotechnology Conference, Jerusalem, Israel*, March **2009**, poster on “Economical Design in Noncovalent Nanoscale Synthesis: Diverse Photofunctional Nanostructures Based on One Covalent Building Block.”
7. *The 44th Annual Scientific Meeting of the Israel Society for Microscopy, Tel Aviv, Israel*, May **2010**, poster on “Perylene Diimide Based Nanostructure - Robust and Adaptive Systems in Aqueous Solutions.”
8. *NanoIsrael 2010, the 2nd International Nanotechnologhy Conference, Tel Aviv, Israel*, November **2010**, poster on “Amphiphilc Terpy Conjugated Perylene Diimide Nanostructure - Responsive yet Robust Systems in Aqueous Solutions.”
9. *The 45th Annual Scientific Meeting of Israel Society for Microscopy, Kibbutz Hagoshrim, Israel*, May, **2011**, poster on “Recyclable Supramolecular Membrane for Size Selective Separation of Nanoparticles.”
10. *NanoIsrael2012, the 3rd International Nanotechnologhy Conference, Tel Aviv, Israel*, March **2012**, poster on “Rational Design of Supramolecular Polymers in Aqueous Solution by Directional Hydrophopic Interactiond.”
11. *Dwek Research Scholl in Chemistry Symposium on “From Molecules to Materials: Advances and Challenges,” Rehovot, Israel*, July **2012**, poster on “Formation of Perylene Diimide Nanocrystals in Aqueous Medium.”
12. *The 15th European Microscopy Congress, Manchester, UK*, September **2012**, poster on “A Recyclable Supramolecular Membrane for Size-Selective Separation of Inorganic and Biological Nanoparticles.”
13. *Gordon Research Conference on Self-Assembly and Supramolecular Chemistry, Les Diablerets, Switzerland*, May **2013**, poster on “Perylene Diimide Self-Assembled Nanocrystals in Aqueous Medium.”
14. *CEMS International Symposium on Supramolecular Chemistry and Functional Materials 2013, Tokyo, Japan*, December **2013**, poster on “A recyclable supramolecular membrane for size-selective separation of nanoparticles”
15. *NanoIsrael 2014, the 4th International Nanotechnology Conference, Tel Aviv, Israel*, March **2014**, poster on “Nano-spirals and Nano-fibers: Self-Assembly via Coordination Chemistry.”
16. *The 48th Annual Scientific Meeting of the Israel Society for Microscopy, Tel Aviv, Israel*, May **2014**, poster on “Nano-spirals and Nano-fibers: Self-Assembly Controlled by Coordination of Transition Metals.”
17. *Dutch-Israeli Chemistry Meeting 2014: Nanochemistry, Suparamolecular chemistry and Beyond, University of Twnete, Twente, The Netherlands*, May **2014**, poster on “Nano-spirals and Nano-fibers: Self-Assembly Controlled by Coordination of Transition Metals.”
18. *The 53rd Annual Scientific Meeting of Israel Society for Microscopy, Tel Aviv, Israel,* May **2019**, oral presentation on “Water purification and CNT hybrids through Self-Assembly of Perylene Diimides.”
19. *Gordon Research Conference on Crystal Growth and Assembly, Manchester, New Hampshire, USA*, June **2019**, poster on “A mechanism of Nonclassical Protein Crystallization.”