

Iris Sonia Weitz

CURRICULUM VITAE

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PERSONAL DATA

Work address: Department of Biotechnology Engineering,

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ACADEMIC EDUCATION

Undergraduate and Graduate Studies

1989 **B.Sc. Chemistry**, The Hebrew University of Jerusalem, Israel

1991 **M.Sc. Organic Chemistry**, Department of Organic Chemistry, The Hebrew University of Jerusalem, Israel

1997 **Ph.D. Medicinal Chemistry**, Department of Medicinal Chemistry and Natural Products, School of Pharmacy, The Hebrew University of Jerusalem, Israel

Post-Doctoral Studies

1997 - 1999 Department of Chemistry and Biochemistry, University of California at Los Angeles (UCLA), CA, USA

ACADEMIC APPOINTMENTS

1992 - 1997 **Research Assistant**, Department of Medicinal Chemistry and Natural Products, School of Pharmacy. The Hebrew University of Jerusalem, Israel

2005 - 2007 **Adjunct Lecturer**, Open University, Beit Biram (Haifa), Israel

2002 - 2007 **Adjunct Lecturer**, Department of Biotechnology Engineering, ORT Braude College, Israel

Feb 2007 - Sep 2011 **Lecturer** (special contract), Department of Biotechnology Engineering, ORT Braude College, Israel

Oct 2011 – Sep 2015 **Lecturer**, Department of Biotechnology Engineering, ORT Braude College, Israel

Oct 2015 – present **Senior Lecturer**, Department of Biotechnology Engineering, ORT Braude College, Israel

PROFESSIONAL ACTIVITIES

College Activities and Services

- 2007 – 2011 Assistant of Head of Department, Department of Biotechnology Engineering
- 2007 – 2018 Coordinator, Internship Students Program, Department of Biotechnology Engineering
- 2011 – 2014 Member, College Strategy Committee, ORT Braude College
- 2012 – 2020 Member, Student Excellence College Committee, ORT Braude College
- 2012 – 2020 Member, Research Committee, Department of Biotechnology Engineering
- 2012 – 2021 Member, Curriculum Committee, Department of Biotechnology Engineering
- 2019 – 2022 Member, The Center for Engineering Education and Entrepreneurship, ORT Braude College
- 2020 – 2023 Member, The Academic Council, Braude College of Engineering
- 2020 – 2023 Chair, The Academic Affairs Committee, Braude College of Engineering
- 2012 – present Academic advisor for the undergraduate students, Department of Biotechnology Engineering

Visiting Positions

Visiting Professor, Campus Bio-Medico University of Rome (UCBM), Italy, 1-7 September 2019

Conference Activities

Session chair, EMN Meeting on Smart and Multifunctional Materials, Berlin, Germany 2016

Conference organizing committee, The 12th Interdisciplinary Research Conference ORT Braude College, 2016

Refereeing for Journals

Small Science, Wiley (2023), Regional Studies in Marine Science, Elsevier (2023), Journal of Inorganic and Organometallic Polymers and Materials, Springer (2022), Advanced Materials Interfaces, Wiley (2022), ACS Applied Nano Materials, ACS (2022), Biomaterial, Elsevier (2021), Journal of Materials Science, Springer (2021), Journal of Environmental Science and Health, Part A, Taylor & Francis (2020), Journal of Medical Mycology, Elsevier (2020).

Membership in Professional Societies

American Chemical Society (ACS), USA; Israel Chemical Society (ICS), Israel; IEEE.

TEACHING EXPERIENCE

Organic Chemistry 2, Organic Chemistry (Lab course), Chemistry of engineering materials, Organic chemistry and polymers, General and Physical Chemistry, General and Analytical Chemistry.

STUDENTS SUPERVISION

Graduate students (M.Sc.), Department of Biomedical Engineering, Technion

Roana Schioppa (November 2016), Noninvasive monitoring of ultrasound-induced hyperthermia mediated by nanoparticles using ultrasound and MR imaging. (Under the supervision of Prof. Haim Azhari, Department of Biomedical Engineering, Technion).

Undergraduate students

Bachelor Thesis, Department of Mechanical Engineering Politecnico di Milano, Italy

- Alessandro Perricone, Marco Peruffo, Elena Vezzulli (2022), Light stimulation for controlled drug release mediated by nanoparticles: literature review. Prof. Paola Saccomandi

Internships Thesis (16 credit points) Department of Biotechnology Engineering, Braude College

- Dima Muadi (2017), Synthesis and characterisation of copper oxide loaded polymeric nanospheres.
- Alex Borodetsky (2018), Encapsulation of copper oxide nanoparticles in polymeric micelles for controlled release
- Inbal Maor (2020), Surface coating of CuO-loaded polymeric nanospheres for enhanced photothermal effects.
- Meytal Rosh Abarbanel (2022), Synthesis and characterization of copper oxide/polydopamine-based multifunctional nanospheres.
- Pnina Matsanov (2022), Effect of formulation variables on the entrapment of indigo carmine within poly (lactic acid) based nanocapsules.
- Shaked Ashkenazi (2023), Preparation, characterization and molecular assembly of encapsulated azo dye using double emulsion method.

Research Projects (2 credit points) Department of Biotechnology Engineering, Braude College

- Yasmin Nishri (2012), Preparation, characterization, and antifungal effects of functionalized CuO nanoparticles.
- Mirit Shoam (2014), Ligand-exchange of acetate-CuO nanoparticles.
- Yuval Meshulam (2014), Synthesis of citrate stabilized CuO nanoparticles.
- Liron Samuk (2016), Antifungal activity of nano-particulate copper against *C. albicans*
- Liron Samuk (2017), Quantitative analysis of ligand surface concentration on CuO nanoparticles
- Alex Borodetsky (2016), PEGylation of CuO nanoparticles for medical applications
- Alex Borodetsky (2017), Azole-conjugated CuO nanoparticles: synthesis, characterization, and determination of in-vitro antifungal activity
- Noam Zyser (2019), Synthesis and characterization of PLGA nanospheres loaded with fluorescent nanoparticles.
- Rotem Link (2019), Determination of copper content of CuO NPs by UV-vis spectroscopy.
- Neta Abarbanel (2019), Synthesis of polymer- Au/Cu nanocomposite.
- Pnina Matsanov (2021), Encapsulation of organic dyes within polymeric nanocapsules.
- Shaked Ashkenazi, (2022, 2023), Encapsulation of indigo carmine for the study of self-assembly under nanoconfinement.
- Ofek Fireman (2023), Quantification of the encapsulated dyes in nano-formulations.

Undergraduate Internship Program College, Department of Biotechnology Engineering, Braude College)

2003 - present: Supervision of undergraduate students (40 students) during their internship period in the following industries and academic institutions (partial list):

Companies. Teva Pharmaceutical Industry, Taro Industry, Novetide, Protalix, BioSite, Bio-Rad, CapsuTech, BioPet, Enzymotec, Central Laboratory of "Mekorot", Refineries (Haifa).

Academic institutions. Technion - Israel Institute of Technology, Newe Ya'ar Research Center, Israel Oceanographic, Kinneret Limnological Research, Galilee Research Institute (Kiryat Shmona), Bar-Ilan University-The Azrieli Faculty of Medicine (Safed)

AWARDS

- 1995 School of Pharmacy Award for outstanding Ph.D. research
1997 Faculty of Medicine Award for excellent Ph.D. thesis (Dean's Award)
2017 Honors College Distinguished Faculty Award
2020 Honors College Distinguished Faculty Award
2021 Honors College Distinguished Faculty Award
2022 Honors College Distinguished Faculty Award

GRANTS

2015-2017 Ministry of Science, Technology & Space, Israel (MOST, grant no. 311876). Title of research: "Investigation of Multimodal Imaging Methods of Nanoparticles for Early Detection of Cancer". H. Azhari (Coordinator and PI), I. S. Weitz (PI)

2018-2019 - Clinical Research Institute at Rambam, Haifa, Israel

LIST of PUBLICATIONS

Peer-Reviewed Papers

1. Vikas, **I. S. Weitz**, L. G. Nobili, L. Magagnin, and P. Saccomandi, Fiber Optic SPR Sensor Modified with Copper Oxide Nanoparticles for Highly Sensitive and Selective Detection of Dopamine. accepted to IEEE Sensor Journal 11.12.2023.
2. M. Rosh Abarbanel, L. Bianchi, S. Korganbayev, A. Pacheco, S. Ashkenazi, P. Saccomandi, **I. S. Weitz**, Thermal Response of CuO/Polydopamine Nanospheres under NIR Laser Irradiation. *Ceramics International*, 49 (14), 24302-24311, 2023. DOI:10.1016/j.ceramint.2022.10.313
3. I. Maor, N. Koifman, E. Kesselman, P. Matsanov, I. Shumilin, D. Harries and **I. S. Weitz**, Molecular Self-Assembly Under Nanoconfinement: Indigo Carmine Scroll Structures Entrapped Within Polymeric Capsules. *Nanoscale*, 13 (48), 20462-20470, 2021. DOI: 10.1039/D1NR06494K
4. I. Maor, S. Asadi, S. Korganbayev, D. Dahis, Y. Shamay, E. Schena, H. Azhari, P. Saccomandi and **I. S. Weitz**, Laser-Induced Thermal Response and Controlled Release of Copper Oxide Nanoparticles from Multifunctional Polymeric Nanocarriers. *Science and Technology of Advanced Materials* 22 (1), 218-233, 2021. DOI: 10.1080/14686996.2021.1883406
5. R. N. Schiopu Aresteanu, A. Borodetsky, H. Azhari, and **I. S. Weitz**, Ultrasound-Induced and MRI-Monitored CuO Nanoparticles Release from Micelle Encapsulation, *Nanotechnology* 32, 055705, 2021. DOI: org/10.1088/1361-6528/abc1a1
6. **I.S. Weitz**, O. Perlman, H. Azhari, and S. S. Sivan, In Vitro Evaluation of Copper Release from MRI-Visible, PLGA-based Nanospheres. *Journal of Materials Science* 56, 718, 2021. DOI: org/10.1007/s10853-020-05296-w

7. O. Perlman, A. Borodetsky, Y. Kauffmann, Y. Shamay, H. Azhari, and **I. S. Weitz**, Gold/Copper@Polydopamine Nanocomposite for Contrast-Enhanced Dual Modal Computed Tomography-Magnetic Resonance Imaging. *ACS Applied Nano Materials* 2 (10), 6124, 2019. DOI: org/10.1021/acsnm.9b00791
8. M. Benguigui, **I. S. Weitz**, M. Timaner, T. Kan, D. Shechter, O. Perlman, S. Sivan, Z. Raviv, H. Azhari, and Y. Shaked, Copper Oxide Nanoparticles Inhibit Pancreatic Tumor Growth Primarily by Targeting Tumor Initiating Cells. *Scientific Reports* 9, 12613, 2019. DOI: org/10.1038/s41598-019-48959-8
9. O. Perlman, **I. S. Weitz**, S. S. Sivan, H. Abu-Khalla, M. Benguigui, Y. Shaked and H. Azhari, Copper oxide loaded PLGA nanospheres: Towards a Multifunctional Nanoscale Platform for Ultrasound based Imaging and Therapy. *Nanotechnology* 29 (18), 185102, 2018. DOI: 10.1088/1361-6528/aab00c
10. O. Perlman, **I. S. Weitz**, and H. Azhari, Target Visualization and Microwave Hyperthermia Monitoring using Nanoparticle-Enhanced Transmission Ultrasound (NETUS). *International Journal of Hyperthermia* 24 1, 2017. DOI: 10.1080/02656736.2017.1378386
11. **I. S. Weitz**, M. Maoz, D. Panitz, S. Eichler, E. Segal, Combination of CuO Nanoparticles and Fluconazole: Preparation, Characterization, and Antifungal Activity Against *Candida albicans*. *Journal of Nanoparticle Research* 17 (342), 1-9, 2015. DOI: 10.1007/s11051-015-3149-4
12. O. Perlman, **I. S. Weitz**, and H. Azhari, Copper Oxide Nanoparticles as Contrast Agents for MRI and Ultrasound Dual-Modality Imaging. *Physics in Medicine and Biology* 60, 5767-5783, 2015. DOI: org/10.1088/0031-9155/60/15/5767
13. **I. S. Weitz** J. L. Sample, R. Ries, E. M. Spain and J. R. Heath, Josephson Coupled Quantum Dot Artificial Solids, *Journal of Physical Chemistry B* 104, 4288-4291, 2000.
14. C.-Y. Liu, A. J. Bard, F. Wudl, **I. S. Weitz** and J. R. Heath, Electrochemical Characterization of Films of Single-Walled Carbon Nanotubes and Their Possible Application in Supercapacitors, *Electrochemical and Solid-State Letters* 2, 577-578, 1999.
15. **I. S. Weitz**, M. Pellegrini, M. Royo, D. F. Mierke and M. Chorev, 1,2,5-Trisubstituted 1, 4-Diazepine-3-one: A Novel Dipeptidomimetic Molecular Scaffold, *Letters in Peptide Science* 5, 83-86, 1998.
16. M. Pellegrini, **I. S. Weitz**, M. Chorev and D. F. Mierke, Conformational Investigation of a Novel, Dipeptide Based Molecular Scaffold, *Letters in Peptide Science* 5, 151-153, 1998.
17. **I. S. Weitz**, M. Pellegrini, D. F. Mierke and M. Chorev, Synthesis of a Trisubstituted 1,4-Diazepine-3-one-Based Dipeptidomimetic as a Novel Molecular Scaffold, *Journal of Organic Chemistry* 62, 2527-2534, 1997.
18. M. Pellegrini, **I. S. Weitz**, M. Chorev and D. F. Mierke, A Trisubstituted 1,4-Diazepine-3-one-Based Dipeptidomimetic: Conformational Characterization by NMR and Computer Simulation, *Journal of the American Chemical Society* 119, 2430-2436, 1997.

19. **I. S. Weitz** and M. Rabinovitz, The Application of C8K for Organic Reduction of Substituted Naphthalene. *Journal of the Chemical Society-Perkin Transactions I* 117-120, 1993.

Conferences Proceedings

1. S. Ashkenazi, **I. S. Weitz**, Effect of nanoconfining PLGA shell on the self-assembly of indigo carmine. *Proceeding of IEEE International Conference on Nanomaterials: Application & Properties (NAP) 2023*
2. S. Korganbayev, S. Asadi, I. Maor, E. Schena, H. Azhari, **I. S. Weitz**, and P. Saccomandi, Measurement of Enhanced Photothermal Effects of CuO-encapsulated Polymeric Nanospheres, *Proceeding of IEEE International Symposium on Medical Measurements and Applications (IEEE MeMea)* (23rd June) 2021. DOI: 10.1109/MeMeA52024.2021.9478675.
3. Korganbayev; S. Asadi, A. Wolf; A. Dostovalov, M. Zalteri, E. Schena, H. Azhari, **I. S. Weitz**, and P. Saccomandi, Highly Dense FBG Arrays for Millimeter-Scale Thermal Monitoring During Nanocomposite-Enhanced Laser Ablation. *Proceedings of SPIE* 11354, Optical Sensing and Detection VI, 113540G (1st April) 2020. <https://doi.org/10.1117/12.2555436>
4. O. Perlman, **I. S. Weitz**, and H. Azhari, Preliminary Study of Copper Oxide Nanoparticles Acoustic and Magnetic Properties for Medical Imaging. *Proceedings of SPIE* 9412, Medical Imaging 2015: Physics of Medical Imaging, 941204, (18 March) 2015. doi: 10.1117/12.2081628
5. M. Pellegrini, **I. S. Weitz**, M. Chorev and D. F. Mierke, Conformational Characterization of Trisubstituted 1,4-Diazepinone as a Dipeptide-Based Molecular Scaffold. *Peptides: Proceedings of the 24th European Peptide Symposium*, R. Ramage, R. Epton Eds. Mayflower Scientific Ltd., Kingswinford U.K. p 715-716, 1998.
6. **I. S. Weitz**, M. Pellegrini, D. F. Mierke and M. Chorev, Synthesis and Characterization of a Novel Trisubstituted Hexahydro-3-Oxo 1H-1,4- Diazepine-Based Dipeptidomimetic Unit. *Peptides: Proceedings of the 24th European Peptide Symposium*, R. Ramage, R. Epton Eds., Mayflower Scientific Ltd., Kingswinford U.K. p 903-904, 1998.

Invited Talks

1. **I. S. Weitz**, Efficient NIR photothermal therapeutic nanocarriers for cancer therapy. 2nd Workshop on Minimally invasive thermal techniques for cancer removal. IEEE Sensors Council Italy Chapter, virtually September 24, 2020.
2. **I. S. Weitz**, High absorbing nanoparticles for improving the selectivity of laser ablation. Workshop on Minimally invasive thermal techniques for cancer removal. IEEE Sensors Council Italy Chapter, Università Campus Bio-Medico di Roma, Rome, Italy, September 4, 2019.

3. **I. S. Weitz**, Multifunctional Properties and Characteristics of Copper Oxide Nanoparticles. EMN Meeting on Smart and Multifunctional Materials. Berlin, Germany, August 25, 2016.

Presentations at Conferences

1. **I. S. Weitz**, Copper oxide nanoparticles in theranostic applications. *The 16th R@B Research at Braude*, Braude College Karmiel, Israel, December 11, 2023 (Oral presentation).
2. S. Ashkenazi, **I. S. Weitz**, Effect of nanoconfining PLGA shell on the self-assembly of indigo carmine. *IEEE International Conference on Nanomaterials: Application & Properties (NAP) 2023, 13th International Conference*, Bratislava, Slovakia, September 12, 2023 (Oral presentation).
3. **S. Ashkenazi**, P. Matsanov, N. Koifman, E. Kesselman, I. Maor, I. Shumilin, D. Harries, **I. S. Weitz**, Tuning the self-assembly of indigo carmine molecules by confinement of polymeric nanocapsules. *The 6th conference of The Israel Society for Biotechnology Engineering (ISBE 2022)*, Tel-Aviv, Israel, December 25, 2022 (Poster).
4. **I. S. Weitz**, Spatially Nanoconfined Assembly of Indigo Carmine by Double Emulsion Technique. *IEEE International Conference on Nanomaterials: Application & Properties (NAP) 2022, 12th International Conference*, Kraków, Poland, September 14, 2022 (Oral presentation).
5. **I. S. Weitz**, Theranostic Copper Oxide Nanoparticles Loaded Polymeric Nanocarriers as a Promising Drug Delivery System. *CIMTEC 2022, 9th Forum on New Materials*, Perugia, Italy, June 28, 2022 (Oral presentation).
6. **S. Korganbayev**, S. Asadi, I. Maor, E. Schena, H. Azhari, **I. S. Weitz**, and P. Saccomandi, *International Symposium on Medical Measurements and Applications (IEEE MeMea)*, virtually June 23, 2021.
7. **D. Dahis**, G. Saar, **I. S. Weitz**, N. Artzi, and H. Azhari, MRI-Contrast Enhancement of Copper Oxide Nanoparticles Following FUS-Mediated BBB Disruption. *7th International Symposium on Focused Ultrasound*, virtually November 9, 2020 (Poster)
8. O. Perlman, **A. Borodetsky**, Y. Kauffmann, Y. Shamay, H. Azhari, and **I. S. Weitz**, Synthesis and Characterization of Gold/Copper@Polydopamine Nanocomposite for a Dual Modal CT-MRI Medical Imaging. *Israeli Society for Medical and Biological Engineering (ISMBE)*, Haifa, Israel, February 23, 2020 (Poster)
9. O. Perlman, **A. Borodetsky**, H. Azhari, and **I. S. Weitz**, Synthesis and Characterization of Gold-Copper Nanocomposite for a Dual-Modal Imaging Contrast Enhancing Material. *The 15th Interdisciplinary Research Conference ORT Braude College*, Kfar Blum in the Upper Galilee., Israel, October 25, 2019 (Oral presentation).
10. **I. S. Weitz**, S. S. Sivan, O. Perlman, H. Azhari, Preparation of PLGA Nanospheres As Carriers for Copper Oxide Nanoparticles-Based Imaging Contrast Agent. *10th International Congress Nanotechnology in Medicine & Biology (NanoBio&Med 2019)*, Graz Austria, April 15, 2019 (Oral presentation).
11. **R. Schiopu**, **A. Borodetsky**, A. Haim, and **I. S. Weitz**, Noninvasive Monitoring of Ultrasound Induced CuO Nanoparticles Release from PEG-b-PLA Micelles using MRI. *Israeli Society for Medical and Biological Engineering (ISMBE)*, Haifa, Israel, February 25-26, 2019 (Poster)
12. **I. S. Weitz**, S. S. Sivan, O. Perlman, and H. Azhari, Encapsulation of CuO Nanoparticles by PLGA for Imaging and Controlled Delivery. *The 14th Interdisciplinary Research*

- Conference ORT Braude College, Kfar Blum in the Upper Galilee., Israel, October 17, 2018 (Oral presentation).*
13. R. Schioppa, A. Borodetsky, A. Haim, and **I. S. Weitz**, Noninvasive Monitoring of Ultrasound Induced CuO Nanoparticles Release from Polymeric Nano-carriers. *NanoIsrael 2018*, Jerusalem, October 10, 2018 (Poster)
 14. A. Borodetsky, I. Arnon, and **I. S. Weitz**, The Antifungal Effect of Surface Modified CuO Nanoparticles Against Candida Species. *NanoIsrael 2018*, Jerusalem, October 10, 2018 (Poster)
 15. M. Benguigui, **I. S. Weitz**, M. Timaner, T. Kan, D. Shechter, S. Sivan, Z. Raviv, H. Azhari, and Y. Shaked, Copper Oxide Nanoparticles Inhibit Pancreatic Tumor Growth by Targeting Tumor Initiating Cells. *17th Biennial Congress of the Metastasis Research Society and Young Investigator Satellite Meeting. MRS 2018*, Princeton, NJ, USA, August 1-5, 2018 (Poster).
 16. **I. S. Weitz**, O. Perlman, S. S. Sivan, and H. Azhari, Synthesis and Characterization of Copper Oxide Based Polymeric Nano-systems for Biomedical Imaging, *CIMTEC 2018, 8th Forum on New Materials*, Perugia, Italy, June 10, 2018 (Oral presentation).
 17. **I. S. Weitz**, Synthesis and Characterization of Engineered Copper Oxide Nanoparticles and Their Medical Applications, *The 13th Interdisciplinary Research Conference ORT Braude College*, Nahsholim Seaside Resort, Israel, October 25, 2017 (Oral presentation).
 18. O. Perlman, **I. S. Weitz** and H. Azhari, Potential Medical Applications of Ultra Small Copper Oxide Nanoparticles, *NanoBio&Med 2017*, Barcelona Spain, November 22, 2017 (Poster).
 19. O. Perlman, **I. S. Weitz** and H. Azhari, Microwave Ablation Planning and Monitoring Using Nanoparticle Enhanced Through-Transmission Ultrasound, *Engineering in Medicine and Biology Conference (EMBC-2017)*, JeJu Island, S. Korea, July 11, 2017 (Poster).
 20. **I. S. Weitz**, M. Maoz, D. Panitz, S. Eichler, and E. Segal. Studying the Therapeutic Antifungal Properties of Copper Oxide Nanoparticles. *6th Annual Symposium of Drug Delivery System 2016 (SDDS-2016)*, Nanjing, China, November 16, 2016 (Oral presentation).
 21. M. Tal, and **I. S. Weitz**, Surface Modifications of Copper Oxide Nanoparticles, *The 12th Interdisciplinary Research Conference ORT Braude College*, Hagoshrim, Upper Galilee, Israel, 2016 (Oral presentation).
 22. O. Perlman, **I. S. Weitz** and H. Azhari, Multimodal Magnetic Resonance and Through-Transmission Ultrasound Imaging of Nanoparticles, *8th HOPE Meeting with Nobel Laureates*, Tsukuba, Japan, 2016 (Poster).
 23. O. Perlman, **I. S. Weitz** and H. Azhari, Multimodal MRI-ultrasound Medical Imaging of Copper Oxide Nanoparticles, *Israeli Society for Medical and Biological Engineering (ISMBE)*, Haifa, Israel, 2016 (Oral presentation).
 24. O. Perlman, **I. S. Weitz**, and H. Azhari, Investigation of Copper Oxide Nanoparticles as a Dual Imaging Modality Contrast Agent for Medical Diagnosis, *The 11th Interdisciplinary Research Conference ORT Braude College*, Hagoshrim, Upper Galilee, Israel, 2015 (Oral presentation).

25. **I. S. Weitz**, M. Maoz, D. Panitz, S. Eichler and E. Segal, The Antifungal Effect of Copper Oxide Nanoparticles on *Candida Albicans*. *The 2nd conference of The Israel Society for Biotechnology Engineering (ISBE 2013)*, Tel-Aviv, Israel, 2013 (Poster).
26. M. Maoz, D. Panitz, Sigal Eichler, Ester Segal and **I. S. Weitz**, The Antifungal Efficacy of Formulated Copper Oxide Nanoparticles. *The 9th Interdisciplinary Research Conference ORT Braude College*, Hagoshrim, Upper Galilee, Israel, 2013 (Oral presentation).
27. **I. S. Weitz**, M. Grozovski and M. Maoz, Copper Oxide Nano-carriers for Bioactive Drugs. *The 8th Interdisciplinary Research Conference ORT Braude College*, Acre, Israel, 2012 (Oral presentation).
28. Maria Grozovski, **I. S. Weitz**, Paraoxonase Activity and Oxidative Stress in Experimental Hypercholesterolemia. *The 8th Interdisciplinary Research Conference ORT Braude College*, Acre, Israel, 2012 (Oral presentation).
29. **I. S. Weitz**, N. Bar-Guy and M. Grozovski, Copper oxide Nanoparticles for Hypercholesterolemia Treatment. *The 2nd International Colloids Conference, Colloids and Nanomedicine*, Amsterdam, The Netherlands, 2012 (Poster).
30. **I. S. Weitz** and M. Grozovski, Metal Oxide Nanoparticles as Statin Carriers. *The 2nd Galil Biomedical Meeting*, Tel-Hai, Israel, 2011 (Oral presentation).
31. **I. S. Weitz**, N. Bar-Guy, M. Grozovski, Effect of Copper oxide Nanoparticles on Cholesterol Levels in The Liver. *The 7th Interdisciplinary Research Conference ORT Braude College*, Kfar Bloom, Israel, 2011 (Oral presentation).
32. **I. S. Weitz** K. Knani, M. Maoz, C. Freitag, J.J. Morrell, The Potential for Using CuO Nanoparticles as a Wood Preservative. *IRG 42: The International Research Group on Wood Preservation*, Queenstown, New Zealand, 2011 (Oral presentation).
33. **I. S. Weitz** and M. Grozovski, Copper Oxide Nanoparticles Functionalization for Medical Applications. *The 6th Interdisciplinary Research Conference ORT Braude College*, Haifa, Israel, 2010 (Oral presentation).
34. **I. S. Weitz**, K. Knani and M. Maoz. Water Soluble Copper Oxide Nanoparticles as an Antifungal Agent. *The 5th Interdisciplinary Research Conference ORT Braude College*, Nahariya, Israel, 2009 (Oral presentation).
35. M. Maoz and **I. S. Weitz**, M. Blumenfeld, C. Freitag and J. J. Morrell. Antifungal Activity of Plant Derived Extracts against *G. trabeum*. *IRG 38: The International Research Group on Wood Preservation*, Grand Teton National Park, Wyoming, USA, 2007 (Oral presentation).
36. M. Maoz and M. Blumenfeld and **I. S. Weitz**. Antifungal Activity of Plant Derived Extracts against *G. rabeum* and *T. rubrum*. *The 3rd Interdisciplinary Research Conference ORT Braude College*, Hagoshrim, Israel, 2007 (Oral presentation).
37. **I. S. Weitz** and M. Maoz, C. Freitag and J.J. Morrell, Preparation of Water-Soluble Antifungal Formulations of Hydrophobic Natural Extracts. *IRG 37: The International Research Group on Wood Preservation*, Tromso, Norway, 2006 (Oral presentation).

38. **I. S. Weitz** and M. Maoz, Water Soluble Antifungal Formulations of Hydrophobic Natural Extracts. *The 2nd Interdisciplinary Research Conference ORT Braude College*, Maalot, Israel, 2006 (Oral presentation).
39. **I. S. Weitz** and **M. Maoz**, Antifungal Treatment of Wood Decay Fungi by Water Soluble Formulations of Natural Extracts. *The 1st Interdisciplinary Research Conference ORT Braude College*, Karmiel, Israel, 2005 (Oral presentation).
40. **I. S. Avital** and M. Rabinovitz, Synthetic Applications of Potassium Graphite Intercalate, C₈K, The 56th Annual Meeting of the Israeli Society Israel, Jerusalem, Israel, 1991 (Poster).

Theses

Ph.D. thesis: Design and Synthesis of 1,4-Diazepine-3-one-Based Dipeptidomimetic as A Novel Molecular Scaffold [Hebrew]. The Hebrew University of Jerusalem, Israel. 1997. Supervisor: Prof. M. Chorev

M.Sc. thesis: Applications of C₈K for Selective Reductions of Organic Compounds [Hebrew]. The Hebrew University of Jerusalem, Israel. 1991. Supervisor: Prof. M. Rabinovitz