

CURRICULUM VITAE

1. Personal Details:

Permanent Home Address: Misheul Susia 8/39, Beer-Sheva, Israel

Cellular Phone: 0526433773

Electronic Address: arielab@sce.ac.il

2. Higher Education

Period of study	Name of Institution and Department	Degree	Year Approval of Degree
1999 - 2003	Ben-Gurion University of the Negev, Department of Chemistry	PhD in Chemistry	2003
1997 - 1998	Ben-Gurion University of the Negev, Department of Chemistry	MSc in Chemistry	1998
1994 - 1997	Ben-Gurion University of the Negev, Department of Chemistry	BSc in Chemistry Graduated Cum Laude	1997

3. Academic Ranks and Tenure in Institutes of Higher Education

Dates	Name of Institution and Department	Rank/Position
Since 2020	Sami Shamoon College of Engineering, Chemical Engineering Department	Associate Professor
2012 - 2020	Tenured Sami Shamoon College of Engineering, Chemical Engineering Department	Senior Lecturer
Since 2009	Sami Shamoon College of Engineering, Chemical Engineering Department	Senior Lecturer
2004 - 2009	Sami Shamoon College of Engineering, Chemical Engineering Department	Lecturer
2007 - 2017	Ben-Gurion University of the Negev, Department of Chemistry	External Lecturer
2000-2004	Sami Shamoon College of Engineering, Chemical Engineering Department	Teaching assistant
1999 - 2004	Ben-Gurion University of the Negev, Department of Chemistry	Teaching assistant

4. Offices in Academic Administration

Dates	Name of Institution and Department	Position
Since September 2018**	Sami Shamoon College of Engineering, Chemical Engineering Department	Head of the Green Engineering second degree
Since September 2018**	Sami Shamoon College of Engineering, Chemical Engineering Department	Head the Nanotechnology specialization
Since September 2018**	Sami Shamoon College of Engineering, Chemical Engineering Department	Member of the Green Engineering pedagogy committee
Since September 2018**	Sami Shamoon College of Engineering, Chemical Engineering Department	Member of the Green Engineering curriculum committee
Since September 2017**	Sami Shamoon College of Engineering, Chemical Engineering Department	Head of the Chemical Engineering Department
Since September 2017**	Sami Shamoon College of Engineering, Chemical Engineering Department	Head of the Chemical Engineering Department Pedagogy Committee
Since September 2017**	Sami Shamoon College of Engineering, Chemical Engineering Department	Head of the Chemical Engineering Department Contents Committee
Since September 2017**	Sami Shamoon College of Engineering, Chemical Engineering Department	Member of Chemical Engineering Department Curriculum Committee
Since September 2017**	Sami Shamoon College of Engineering, Chemical Engineering Department	Responsible for 3rd and 4th year students
Since 2017**	Sami Shamoon College of Engineering, Chemical Engineering Department	Member of SCE Green Committee
Since 2007 - 2017	Sami Shamoon College of Engineering, Chemical Engineering Department	Member of the Chemical Engineering Department Contents Committee

* Since 2009 Senior Lecturer. ** Since 2012 Tenured.

5. Scholarly Positions and Activities outside the Institution

Dates		Position
2020**	Molecules	Topic Editor, In process
2020**	ChemistrySelect	Referee (of the article "Synthesis, spectral characterization and biological studies of NiII, CuII, ZnII and CdII complexes with 1,2,4-triazole based bidentate Schiff Base")
2019**	Nanoscale	Referee (of the article "On the mechanism of reduction of $M(H_2O)_m^{n+}$ by borohydride: The case of $Ag(H_2O)^{2+}$ ")

Dates		Position
2018**	Journal of Coordination Chemistry	Referee (of the article "Iron catalyzed demethylation of acetic acid")
2018**	Environmental Science & Technology	Referee (of the article "Surface facet of CuFeO ₂ nanocatalyst: A key parameter for H ₂ O ₂ activation in Fenton-like reaction and organic pollutant degradation")
2017**	Advanced Oxidation Technologies for the Treatment of Water, Air and Soil conference	Member of the international organizing committee
2016**	Advanced Oxidation Technologies for the Treatment of Water, Air and Soil conference	Member of the international organizing committee
2016**	Oxidative Medicine and Cellular	Referee
2015**	RSC Advances	Referee
2015**	Redox Report	Referee
Since 2009*	The Royal Society of Chemistry	Membership

* Since 2009 Senior Lecturer. ** Since 2012 Tenured.

6. Participation in Scholarly Conferences

a. Active participation

Date	Name of Conference	Place of Conference	Subject	Role
February 2020**	85th Annual Meeting of the Israel Chemical Society	Jerusalem, Israel	Development of novel sol-gel based methods for the recycling of heavy metal ions and the solidification of radioactive waste.	
September 2019**	2019 Israel Electrochemistry Meeting	Beer Sheva, Israel.	Enhancing energy harvesting with DPN-fabricated meta-chemical surfaces.	
February 2018**	The 83 rd Meeting of the Israel Chemical Society	Tel-Aviv, Israel.		Chair, Plenary 3
February 2016**	The 81 st Meeting of the Israel Chemical Society	Tel-Aviv, Israel.	Reductive dehalogenation of haloacetic acids catalyzed by Ag ⁰ -NPs incorporated in sol-gel matrices.	
February 2016**	The 81 st Meeting of the Israel Chemical Society	Tel-Aviv, Israel.	Polyoxometalates entrapped in sol-gel matrices for reducing electron exchange column applications.	
October 2015**	ISRAELECTRO CHEMISTRY 2015	Beer Sheva, Israel.	Electrocatalysis by entrapped Cu ^{II} (2,5,8,11-tetramethyl-	

Date	Name of Conference	Place of Conference	Subject	Role
			2,5,8,11-tetraaza-dodecane) ²⁺ in sol-gel electrodes.	
October 2015**	The 10 th International Conference on Magnesium Alloys and their Applications	JeJu, South Korea.	The synergetic effect of the Fenton reaction to corrosion of magnesium implants.	
July 2015**	EICC3	Wroclaw, Poland.	Electrocatalysis by entrapped Cu ^{II} (2,5,8,11-tetramethyl-2,5,8,11-tetraaza-dodecane) ²⁺ in sol-gel electrodes.	
August 2014**	ISOS XVII, 2014, The 17 th International Symposium on Silicon Chemistry	Berlin, Germany.	Ni(II)Cyclam in a sol-gel matrix as an electro-catalyst.	
March 2013**	The 28 th Miller Conference on Radiation Chemistry	Dead Sea, Israel.	Ni(II)Cyclam in a sol-gel matrix as an electro-catalyst.	
February 2013**	The 78 th Annual Meeting of the Israel Chemical Society	Tel-Aviv, Israel.	Ni(II)Cyclam in a sol-gel matrix as an electro-catalyst.	
September 2012*	ICCC 40	Valencia, Spain.	The effect of bicarbonate on the Fenton-like reaction of Co ²⁺ (aq) with H ₂ O ₂ .	
July 2011*	The 9 th World Congress on Neurohypophysia 1 Hormones – WCNH	Northeastern University, Boston, MA, USA.	Labor augmentation with oxytocin decreases glutathione level.	
January 2011*	The 76 th Annual Meeting of the Israel Chemical Society	Tel-Aviv, Israel.	The effect of bicarbonate on the Fenton-like reaction of Co ²⁺ (aq) with H ₂ O ₂ .	
September 2010*	3 rd EuCheMS Chemistry Congress	Nürnberg, Germany.	The effect of 2,5,8,11-tetramethyl-2,5,8,11-tetraazadodecane as a ligand on the catalytic properties of Cu(I).	
January 2009	The 74 th Annual Meeting of the Israel Chemical Society	Tel Aviv, Israel.	The effect of 2,5,8,11-tetramethyl-2,5,8,11-tetraazadodecane as a ligand on the catalytic properties of Cu(I).	

Date	Name of Conference	Place of Conference	Subject	Role
July 2005	8 th FIGIPAS Meeting in Inorganic Chemistry	Athens, Greece.		Chairman
July 2005	8 th FIGIPAS Meeting in Inorganic Chemistry	Athens, Greece.	Ligand effects on the chemical activity of copper(I) complexes.	
January 2003	The 68 th Meeting of the Israel Chemical Society	Tel Aviv, Israel.	Mechanism of reduction of NO ₂ ⁻ by Cu ⁺ _{aq} , A comparison with CuNIR enzyme.	
July 2002	35 th International Conference on Coordination Chemistry	Heidelberg, Germany.	Kinetics of the reactions of copper(I) with nickel(III)cyclam(SO ₄) ₂ ⁻ and with (NH ₃) ₅ Co(III)Cl ²⁺ .	
July 2000	34 th International Conference on Coordination Chemistry	Edinburgh, Scotland.	The reaction mechanism of nitrosothiols with copper(I).	
1999	Conference of Bioinorganic Chemistry	Florence, Italy.	The reaction mechanism of nitrosothiols with Cu ⁺ _{aq} .	
September 1998	33 th International Conference on Coordination Chemistry	Florence, Italy.	Mechanistic insight into the copper catalyzed decomposition of nitrosothiols.	
February 1998	The 63 rd Meeting of the Israel Chemical Society	Tel Aviv, Israel.	Mechanistic insight into the copper catalyzed decomposition of nitrosothiols.	

* Since 2009 Senior Lecturer. ** Since 2012 Tenured

b. Organization of Conferences or Sessions

Date	Name of Conference	Place of Conference	Subject	Role
November 2017**	Advanced Oxidation Technologies for Treatment of Water, Air and Soil conference	Florida, Tampa, USA.		Member of the international organizing committee
November 2016**	Advanced Oxidation Technologies for Treatment of Water, Air and Soil conference	Atlanta, GA, USA.		Member of the international organizing committee

* Since 2009 Senior Lecturer. ** Since 2012 Tenured

7. Lectures

Date	Name of Conference	Place of Conference	Subject
March 2021**	CATA 2020	London, UK.	Enhancing energy harvesting with DPN-fabricated Meta-Chemical Surfaces.
June 2019**	EuChemS Inorganic Chemistry Conference	Moscow, Russia.	Acceleration of the corrosion reaction of magnesium by Fenton reagents.
June 2018**	Seminar in Zuckerberg Institute for Water Research, Sde Boqer Campus	Sde Boqer Campus, BGU.	Efficient and green sol-gel processes for environmental applications.
November 2017** Invited lecture	Advanced Oxidation Technologies for Treatment of Water	Tampa, USA.	The role of carbonate in heterogeneous catalytic water oxidation by Ni(II) complex.
June 2017**	IICHE	Tel-Aviv, Israel.	The role of carbonate and phosphate in the electro-catalytic water oxidation by Ni ^{II} L ²⁺ .
November 2016** Invited lecture	Advanced Oxidation Technologies for Treatment of Water	Atlanta, USA.	The role of carbonate and phosphate in the electro-catalytic water oxidation by Ni ^{II} L ²⁺ .
June 2016**	ECIRM 2016	Krakow, Poland.	The reaction between the peroxide VO(η^2 -O ₂)(pyridine-2-carboxylate)·2H ₂ O and Fe ^{II} _{aq} is not a Fenton-like reaction.
June 2016**	IICHE	Tel-Aviv, Israel.	Entrapment of the complex Cu(2,5,8,11-tetramethyl-2,5,8,11-tetraazadodecane) in sol-gel electrodes for electrocatalysis.
June 2016**	EMN Mesoporous Materials	Prague, Czech Republic.	Entrapment of the complex Cu(2,5,8,11-tetramethyl-2,5,8,11-tetraazadodecane) in sol-gel electrodes for electrocatalysis.
June 2015**	EICC3	Wroclaw, Poland.	Entrapment of the complex Cu(2,5,8,11-tetramethyl-2,5,8,11-tetraazadodecane) in sol-gel electrodes for electrocatalysis.
July 2013**	EICC	Jerusalem, Israel.	Does Co(H ₂ O) ₆ ²⁺ react with H ₂ O ₂ via a Fenton-like reaction?
July 2008	ICCC38	Jerusalem, Israel.	Is it always correct to use the Marcus cross relation for calculations of electron self-exchange rates?
July 2005	8 th FIGIPAS Meeting in Inorganic Chemistry	Athens, Greece.	Ligand effects on the chemical activity of copper(I) complexes.

* Since 2009 Senior Lecturer. ** Since 2012 Tenured.

8. Teaching

a. Courses Taught in Recent Years

Year	Name of Course	Type of Course	Degree	Number of Students
Since 2020**	Nano-Species	Lecture	First Degree	15
Since 2017**	Information Retrieval	Lecture	First Degree	40
Since 2016**	Physical Chemistry Laboratory	Laboratory#	First Degree	35
Since 2011*	Introduction to Nano Technology	Lecture and Laboratory#	First Degree	20
Since 2004	Physical Chemistry	Lecture	First Degree	40 - 50
Since 2004	Analytical Chemistry	Lecture	First Degree	40 - 50
Since 2004	Introduction to Chemistry	Lecture	First Degree	40 - 50
Since 2004	Analytical Chemistry Laboratory	Laboratory#	First Degree	40 - 50

laboratory supervisor. * Since 2009 Senior Lecturer. ** Since 2012 Tenured.

b. Supervision of Graduate Students

Name of Student	Title of Thesis	Degree	Date of Completion/ in Progress	Students Achievements	
Zorik Shamish**	Development of water oxidation electrodes for green energy using DPN	MSc.	Since 2019- In Progress		With Dr. Dror Shamir and Dr. Moshe Zohar
Catherine Dobos**	Development of a glucose sensor by DPN technique.	MSc.	Since 2019- In Progress		With Dr. Moshe Zohar
Ziv Gardos**	Quantifying exposure to ionizing radiation by improving separation and staining of dicentric chromosomes using a modified c-banding technique.	MSc.	Since 2019- In Progress		With Dr. Inna Levitsky and Dr. Rafi Gonen
Dganit Ben Hamu**	Development of a glucose bio-sensor by DPN technique.	MSc.	Since 2019- In Progress		With Dr. Moshe Zohar
Shira Biton**	Heterogeneous Fenton reaction by	MSc	Since 2018- In Progress		-----

	Perovskite as a catalyst.				
Ido Sabag**	Maximizing the interaction between solar panels and optical fibers to generate alternative energy.	MSc	Since 2018- In Progress		With Dr. Nir Trabelsi
Lior Carmel**	Treatment organic waste by nano titania and tungsten oxide.	PhD student	Since 2019- In Progress		With Prof. Dan Meyerstein
Yaniv Wolfer**	Fixation complexes of Transition metal in sol-gel matrix for using in variety catalytic processes.	PhD	Date of Completion 2018	One article	With Prof. Dan Meyerstein
Shiran Aharon**	Entrapment of Hoveyda–Grubbs catalysts in sol-gel matrices, study of their activities in heterogeneous systems.	MSc	Since 2018- In progress		With Prof. Dan Meyerstein and Dr. Eyal Tzur
Kira Bresler**	Fenton like reaction in heterogeneous system.	MSc	Date of Completion 2019		With Prof. Dan Meyerstein
Ella Fastovski**	The mechanism of the oxidation reaction of Fe ^{II} ions by the VO(O ₂) pyridine-2-carboxylate·2H ₂ O complex.	MSc	Date of Completion 2017	One article	With Prof. Dan Meyerstein
Inbar Elias**	Entrapment of the complex Cu(2,5,8,11-tetramethyl-2,5,8,11-tetraazadodecane) in sol-gel electrodes for electrocatalysis.	MSc	Date of Completion 2015		With Prof. Dan Meyerstein
Inna Shusterman*	The Effect of Bicarbonate on the Reaction of Co ²⁺ (aq) with H ₂ O ₂ .	MSc	Date of Completion 2012	Two articles	With Prof. Dan Meyerstein
Yaniv Wolfer*	The effect of 2,5,8,11-tetramethyl-2,5,8,11-tetraazadodecane	MSc	Date of Completion 2010	One article	With Prof. Dan Meyerstein

	on Meerwein reaction.				
--	--------------------------	--	--	--	--

* Since 2009 Senior Lecturer. ** Since 2012 Tenured.

9. PUBLICATIONS

a. Peer reviewed papers

1. ***Michael Meistelman, Dan Meyerstein, Amos Bardea, **Ariela Burg**, Dror Shamir, Yael Albo. Reductive Dechlorination of Chloroacetamides with NaBH₄ Catalyzed by Zero Valent Iron, ZVI, Nanoparticles in ORMOSIL Matrices Prepared via the Sol-Gel Route, *Catalysts* (2020), 10 (9), 986.
2. ** Zorik Shamish, Moshe Zohar, Dror Shamir, **Ariela Burg** (corresponding author), Controlling the size and pattern pitch of Ni(OH)₂ nanoclusters using dip-pen nanolithography to improve water oxidation, *Molecules*, IF 3.06, Q1, accepted for publication.
3. ** Dror Shamir, Yaniv Wolfer, Alexander I. Shames, Yael Albo, **Ariela Burg** (corresponding author), Stabilization of Ni(I)(1,4,8,11-tetraazacyclotetradecane)⁺ in a sol-gel matrix: It's plausible use in catalytic processes. *Israel Journal of Chemistry* (2020), 60, 1-7. IF 2.22, Q1
4. ** Dror Shamir, Inbar Elias, Yael Albo, Dan Meyerstein, **Ariela Burg** (corresponding author), ORMOSIL-entrapped copper complex as electrocatalyst for the heterogeneous dechlorination of alkyl halides. *Inorganica Chimica Acta* (2020), 500, 119225. IF 2.433, Q2, cited by 1.
5. ** Moshe Zohar, Dror Shamir, Guy Ben-Hamu, **Ariela Burg** (corresponding author), An innovative, DPN-based method for analyzing the early stages of Mg corrosion under natural conditions. *Metals and Materials International* (2019), 1-7. IF 1.647, Q1.
6. ** Neelam Singh, Dan Meyerstein, Jaydeep Adhikary, **Ariela Burg**, Dror Shamir, Yael Albo, Zero-valent iron nanoparticles entrapped in SiO₂ sol-gel matrices: A catalyst for the reduction of several pollutants. *Catalysis Communications* (2019), 133, 105819. IF 3.674, Q1.
7. ** Tali Silberstein, Batel Hamou, Shelly Cervil, Tamar Barak, **Ariela Burg**, Oshra Saphier, Colostrum of preeclamptic women has high level of polyphenols and better resistance to oxidative stress in comparison to healthy women. *Oxidative Medicine and Cellular Longevity* (2019) 2019, 1380605. IF 4.868, Q1, cited by 2.
8. ** Guy Ben Hamu, Dror Shamir, Moshe Zohar, **Ariela Burg** (corresponding author), Acceleration of the corrosion reaction of magnesium by Fenton reagents. *Journal of Coordination Chemistry* (2018), 71(11-13), 1852-1862. IF 1.685, Q3.
9. ** Neelam Singh, Dan Meyerstein, **Ariela Burg**, Dror Shamir, Yael Albo, Polyoxometalates entrapped in sol-gel matrices as electron exchange columns and catalysts for the reductive dehalogenation of halo-organic acids in water. *Journal of Coordination Chemistry* (2018), 71 (19), 3180-3193. IF 1.685, Q3.
10. **Jaydeep Adhikary, Dan Meyersteina, Vered Marks, Michael Meistelman, Gregory Gershinsky, **Ariela Burg**, Dror Shamir, Haya Kornweitz, Yael Albo, Sol-gel entrapped Au⁰ - and Ag⁰ -nanoparticles catalyze reductive dehalogenation of halo-organic compounds by BH₄⁻. *Applied Catalysis B: Environmental* (2018), 239, 450-469. IF 14.226, Q1, cited by 4.
11. ** Dror Shamir, Dan Meyerstein, Israel Zilbermann, **Ariela Burg**, Yael Albo, Alexander I Shames, Radion Vainer, Eitan J.C. Borojovich, Guy Yardeni, Haya Kornweitz, Eric Maimon, Copper(II) catalyses the reduction of perchlorate by both formaldehyde and by dihydrogen in

- aqueous solutions. *Journal of Coordination Chemistry* (2018), 71(16-18), 2905-2912. IF 1.685, Q3.
12. ** Guy Ben Hamu, Ariela Burg (corresponding author), The Role of Fenton reaction in biodegradable magnesium and its alloys. *Publisher NACE International* (2017). IF 0.3, Q3.
 13. ** Michael Meistelman, Jaydeep Adhikary, Ariela Burg, Dror Shamir, Gregory Gershinsky, Dan Meyerstein, Yael Albo, Ag⁰ and Au⁰ nanoparticles encapsulated in sol-gel matrices as catalysts in reductive de-halogenation reactions. *Chimica Oggi - Chemistry Today* (2017), 35 (5), 16-19. IF 0.13, Q4, cited by 2.
 14. ** Neelam Singh, Yael Albo, Ariela Burg, Dror Shamir, Dan Meyerstein, Bromate reduction by an electron exchange column. *Chemical Engineering Journal* (2017), 330, 419-422. IF 8.355, Q1, cited by 7.
 15. ** Ariela Burg (corresponding author), Yaniv Wolfer, Dror Shamir, Yael Albo, Haya Kornweitz, Eric Maimon, Dan Meyerstein, The role of carbonate in electro-catalytic water oxidation by using Ni (1,4,8,11-tetraazacyclotetradecane)²⁺. *Dalton Transactions* (2017), 46, 10774-10779. IF 4.052, Q1, cited by 8.
 16. ** Jaydeep Adhikary, Michael Meistelman, Ariela Burg, Dror Shamir, Dan Meyerstein, Yael Albo, Reductive dehalogenation of monobromo- and tribromoacetic acid by sodium borohydride catalyzed by gold nanoparticles entrapped in sol-gel matrices follows different pathways. *European Journal of Inorganic Chemistry* (2017), 2017(11), 1510-1515. IF 2.578, Q1, cited by 6.
 17. ** Yael Albo Neelam, Dror Shamir, Ariela Burg, Subramanian Palaniappan, Gil Goobes, Dan Meyerstein, Polyoxometalates entrapped in sol-gel matrices for reducing electron exchange column applications. *Journal of Coordination Chemistry* (2016), 69(23), 3449-3457. IF 1.79, Q2, cited by 3.
 18. ** Ariela Burg (corresponding author), Ella Fastovesky, Dror Shamir, Haya Kornweitz, Dan Meyerstein, The reaction between the peroxide VO(η^2 -O₂)(pyridine-2-carboxylate)·2H₂O and Fe^{II}_{aq} is not a Fenton-like reaction. *Journal of Coordination Chemistry* (2016), 69(11-13), 1722-1729. IF 1.79, Q2, cited by 3.
 19. ** Ariela Burg (corresponding author), Dror Shamir, Lina Apelbaum, Yael Albo, Eric Maimon, Dan Meyerstein, Electrocatalytic oxidation of amines by Ni-(1,4,8,11-tetraazacyclotetradecane)²⁺ entrapped in sol-gel electrodes. *European Journal of Inorganic Chemistry* (2016), (4), 459-463. IF 2.444, Q1, cited by 1. **Cover article.**
 20. ** Oshra Saphier, Tali Silberstein, Guy Yardeni, Jeanine Blumenfeld, Israel Zilbermann, Ariela Burg (corresponding author), Role of lycopene in preventing lipid peroxidation products in commercial infant milk formula. *The Journal of Maternal – Fetal and Neonatal Medicine* (2016), 29(17), 2865-2869. IF 1.674, Q2.
 21. ** Ariela Burg (corresponding author), Oshrat Levy-Ontman, Salt effect on the antioxidant activity of red microalgal sulfated polysaccharides in soy-bean formula. *Marine Drugs* (2015), 13(10), 6425-6439. IF 3.772, Q2, cited by 7.
 22. ** Haya Kornweitz, Ariela Burg, Dan Meyerstein, Plausible mechanisms of the Fenton-like reactions, M = Fe(II) and Co(II), in the presence of RCO₂⁻ substrates: are OH[•] radicals formed in the process? *Journal of Physical Chemistry A* (2015), 119(18), 4200-4206. IF 2.871, Q1, cited by 23.

23. ** Ariela Burg (corresponding author), Dror Shamir, Inna Shusterman, Haya Kornweitz, Dan Meyerstein, The role of carbonate as a catalyst of Fenton-like reactions in AOP processes, CO_3^- as the active intermediate. *Chemical Communications* (2014), 50(86), 13096 – 13099. IF 6.319, Q1, cited by 18.
24. ** Ariela Burg (corresponding author), Inna Shusterman, Haya Kornweitz, Dan Meyerstein, Three H_2O_2 molecules are involved in the “Fenton-like” reaction between $\text{Co}(\text{H}_2\text{O})_6^{2+}$ and H_2O_2 . *Dalton Transactions* (2014), 43(24), 9111-9115. IF 4.052, Q1, cited by 15.
25. ** Jeanine Blumenfeld, Tali Silberstein, Ariela Burg, Oshra Saphier, Variability in omega-3 fatty acid content of canned tuna fish: results from a comparison of different preservation fluid. *Burapha Science Journal* (2013), 18, 2.
26. ** Oshra Saphier, Jeanine Blumenfeld, Tali Silberstein, Tamar Tzor, Ariela Burg (corresponding author), Fatty acid composition of breastmilk of Israeli mothers. *Indian Pediatrics* (2013), 50(11), 1044-1046. IF 1.152, Q2, cited by 15.
27. ** Tali Silberstein, Ariela Burg, Jeanine Blumenfeld, Boaz Sheizaf, Tamar Tzur, Oshra Saphier, Saturated fatty acid composition of human milk in Israel: A comparison between Jewish and Bedouin Women. *The Israel Medical Association Journal* (2013), 15, 156-159. IF 1.036, Q2, cited by 10.
28. ** Ariela Burg (corresponding author), Yaniv Wolfer, Haya Kornweitz, Limor Shenar-Jackson, Alexandra Masarwa, Dan Meyerstein, The Cu(I) catalyzed Meerwein reaction in aqueous solutions proceeds via a radical mechanism. The effect of several ligands. *Dalton Transactions* (2013), 42(14), 4985-4993. IF 4.052, Q1, cited by 3.
29. * Oshra Saphier, Tali Silberstein, Eldad Silberstein, Jeanine Blumenfeld, Tamar Tzur, Boaz Sheizaf, Ariela Burg (corresponding author), Breast milk of Jewish and Bedouin ethnic origins have a higher resistance against lipid peroxidation compare to milk substitutes. *BioChemistry: An Indian Journal* (2011), 5(2), 137-139. IF 0.11.
30. * Yair Lavi, Ariela Burg, Eric Maimon, Dan Meyerstein, Electron exchange columns through entrapment of a nickel cyclam in a sol-gel matrix. *Chemistry-A European Journal* (2011), 17(18), 5188-5192. IF 5.317, Q1, cited by 7, cover article.
31. Naomi Schneid-Kofman, Tali Silberstein, Oshra Saphier, Iris Shai, Dorith Tavor, Ariela Burg, Labor augmentation with oxytocin decreases glutathione level. *Obstetrics and Gynecology International* (2009), 1-4. Q2, cited by 20.
32. Ariela Burg, Dan Meyerstein, Is it always correct to use the Marcus cross relation for calculations of electron self-exchange rates? *Inorganica Chimica Acta* (2010), 363(4), 737-740. IF 2.433, Q2, cited by 4.
33. Ariela Burg (corresponding author), Tali Silberstein, Guy Yardeni, Dorith Tavor, Jeanine Blumenfeld, Israel Zilbermann, Oshra Saphier, Role of radicals in the lipid peroxidation products of commercial infant milk formula. *Journal of Agricultural and Food Chemistry* (2010), 58(4), 2347-2350. IF 3.571, Q1, cited by 9.
34. Orit Paamoni-Keren, Tali Silberstein, Ariela Burg, Iris Raz, Moshe Mazor, Oshra Saphier, Oxidative stress as determined by glutathione (GSH) concentrations in venous cord blood in elective cesarean delivery versus uncomplicated vaginal delivery. *Archives of Gynecology and Obstetrics* (2007), 276(1), 43-46. IF 2.199, Q2, cited by 36.
35. Ariela Burg (corresponding author), Eric Maimon, Haim Cohen, Dan Meyerstein, Ligand effects on the chemical activity of copper(I) complexes: outer- and inner-sphere oxidation of

CuII. *European Journal of Inorganic Chemistry* (2007), 2007(4), 530-536. IF 2.578, Q1, cited by 11.

36. Ariela Burg, Evgenia Lozinsky, Haim Cohen, Dan Meyerstein, Mechanism of reduction of the nitrite ion by CuI complexes. *European Journal of Inorganic Chemistry* (2004), 2004(18), 3675-3680. IF 2.578, Q1, cited by 13.
37. Nadav Navon, Ariela Burg, Haim Cohen, Rudi Van Eldik, Dan Meyerstein, Ligand effects on the reactivity of Cu^IL complexes towards Cl₃CCO₂⁻. *European Journal of Inorganic Chemistry* (2002), 2002(2), 423-429. IF 2.578, Q1, cited by 9.
38. Ariela Burg, Haim Cohen, Dan Meyerstein, The reaction mechanism of nitrosothiols with copper(I). *Journal of Biological Inorganic Chemistry* (2000), 5(2), 213-217. IF 3.632, Q1, cited by 24.
39. Magal Saphier, Ariela Burg, Shlomit Sheps, Haim Cohen, Dan Meyerstein, Complexes of copper(I) with aromatic compounds in aqueous solutions. *Journal of the Chemical Society, Dalton Transactions: Inorganic Chemistry* (1999), 11, 1845-1850. IF 4.052, Q1, cited by 7.

b. Chapters in books

1. ****Ariela Burg**, Dror Shamir, Dan Meyerstein, Yael Albo, "Sol-gel Matrices in redox processes". *The Eighteenth Israeli - Russian Bi-National Workshop, The optimization of composition, structure and properties of metals, oxides, composites, nano and amorphous materials* (2019).
2. ****Ariela Burg** (corresponding author), Oshrat Levy-Ontman, "Salt effect on the antioxidant activity of red microalgal sulfated polysaccharides in soy-bean formula". In book: *Marine polysaccharides*. Publisher: MDPI, Editor: P. Laurienzo (2018), Vol.1, 98-109.
3. **** Tomer Zidki**, Ronen Bar-Ziv, Ariela Burg, Yael Albo, Dan Meyerstein, "Radical reactions at Surfaces". In book: *The Optimization of Composition, Structure and Properties of Metals, Oxides, Composites, Nano and Amorphous Materials*. Publisher: Russian Academy of Sciences, Yekatrinnburg, Editors: M. Zinigrad and L. Leontiev, Ural Branch Russian Academy of Sciences (2016), 180-185.
4. ****Yael Albo**, Michael Meistelman, Ariela Burg, Dror Shamir, "Entrapment of Ag⁰ and Au⁰ nanoparticles in sol-gel matrices for catalytic applications". In book: *The Optimization of Composition, Structure and Properties of Metals, Oxides, Composites, Nano and Amorphous Materials*. Publisher: Russian Academy of Sciences, Ekaterinburg, Editors: M. Zinigrad and L. Pastukhuv, Ural Branch Russian Academy of Science (2016), 4-9.
5. ****Ariela Burg** (corresponding author), Yael Albo, Dror Shamir, Yair Lavi, Michael Meistelman, Neelam Singh, Dan Meyerstein, "Transition metal complexes and nano-particles entrapped in sol-gel matrices as electron exchange columns and as redox catalysts". In book: *The optimization of Composition, Structure and Properties of Metals, Oxides, Composites, Nano and Amorphous Materials*. Publisher: Russian Academy of Sciences, Ekaterinburg, Editors: M. Zinigrad and L. Pastukhuv, Ural Branch Russian Academy of Sciences (2015), 59-70.
6. ****Ariela Burg**, Dan Meyerstein D, "The chemistry of monovalent copper in aqueous solutions". Chapter in: *The chemistry of monovalent copper in aqueous solutions, Advances in Inorganic Chemistry* (2012), 64, 219-261.

* Since 2009 Senior Lecturer.

** Since 2012 Tenured. *** Since 2020 Associate Professor