LIST OF PUBLICATIONS

PUBLICATIONS IN PEER-REVIEWED JOURNALS

   Crystallization from microemulsions - a novel method for the preparation of new crystal forms of aspartame.

   Formation of polysulfides in an oxygen rich freshwater lake and their role in the production of volatile sulfur compounds in aquatic systems.
   Environmental Science & Technology 34 (22): 4741-4746.

   Formation of carbonyl sulfide by the reaction of carbon monoxide and inorganic polysulfides.
   Environmental Science & Technology 37 (9): 1865-1872.

   Crystallization of organic compounds in reversed micelles. III. Solubilization of aspartame.

   Kinetics of disproportionation of inorganic polysulfides in undersaturated aqueous solutions at environmentally relevant conditions.
   Aquatic Geochemistry 9 (4): 291-304.

   Electrospray ionization mass spectrometric analysis of aqueous polysulfide solutions.
   Microchimica Acta 146(3-4): 229-237.

   Inorganic polysulfides quantitation by methyl iodide derivatization: dimethylpolysulfide formation potential.
   Water Science and Technology 49 (9): 179-184.

   Pyrolysed carbon supported cobalt porphyrin: a potent catalyst for oxidation of hydrogen sulfide.
   Applied Catalysis B: Environmental 54 (4): 225-235.

   Equilibrium distribution of polysulfide ions in aqueous solutions at 25°C: a new approach for the study of polysulfides’ equilibria.
Sulfur stable isotope distribution of polysulfide anions in an (NH₄)₂S₈ aqueous solution. 

Method for the determination of inorganic polysulfide distribution in aquatic systems. 
Analytical Chemistry 78 (8), 2631-2639.

Equilibrium distribution of polysulfide ions in aqueous solutions at different temperatures by rapid single phase derivatization. 
Environmental Science & Technology 41 (7), 2395 – 2400.

Speciation of polysulfides and zerovalent sulfur in sulfide rich water wells in Southern and Central Israel. 
Aquatic Geochemistry 14 (2), 171-192.

Improved cyanolysis protocol for detection of zero-valent sulfur in natural aquatic systems. 
Limnology and Oceanography: Methods 7, 442 – 448.

Protocol for quantitative detection of elemental sulfur and polysulfide zero-valent sulfur distribution in natural aquatic samples. 
Geostandards and Geoanalytical Research 33, 415 – 435.

Solubility of cyclooctasulfur in pure water and sea water at different temperatures. 
Geochimica et Cosmochimica Acta 73, 6022 – 6028.

Dynamics of zero-valent sulfur species including polysulfides at seep sites on intertidal sand flats (Wadden Sea, North Sea). 

Sulfur cycling in a stratified lake with moderately high sulfate: constraints from quadruple S isotopes. 
Geochimica et Cosmochimica Acta 74, 4953 – 4970.

Multiple sulfur isotope analysis of volatile organic sulfur compounds and their sulfonium precursors in coastal marine environments. 
Marine Chemistry 124, 78 – 89.
Sulfate reduction below the sulfate-methane transition in Black Sea sediments.

Farquhar, J., Ferdelman T. G. (2011)
Biogeochemical sulfur cycling in the water column of a shallow stratified sea-water
lake: Speciation and quadruple sulfur isotope composition.
Marine Chemistry 127, 144 – 154.

Quantification of free and metal-complexed cyanide by tetrathionate derivatization.
International Journal of Environmental Analytical Chemistry 92, 1506 – 1517.

Hydrogen cyanide accumulation and transformations in non-polluted salt marsh
sediments.
Aquatic Geochemistry 19, 97 – 113.

Intermediate sulfur oxidation state compounds in the euxinic surface sediments of the
Dvurechenskii Mud Volcano (Black Sea).
Geochimica et Cosmochimica Acta 105, 130 – 145.

25. Farquhar J., Cliff J., Zerkle A.L., Kamysny Jr. A., Poulton S.W., Claire M.,
Adams D., Harms B. (2013)
Pathways for Neoarchean pyrite formation constrained by mass-independent sulfur
isotopes.
Proceedings of the National Academy of Sciences, 110, 17638 – 17643.

Quadruple sulfur isotope constraints on the origin and cycling of volatile organic
sulfur compounds in a stratified sulfidic lake.
Geochimica et Cosmochimica Acta 120, 251 – 262.

Microbial consumption of zero-valence sulfur (S^0) in marine benthic habitats.
Environmental Microbiology, 16, 3416-3430.

Multiple sulfur isotopes fractionation evidence of abiotic sulfur transformations in
Yellowstone National Park geothermal springs.
Geochemical Transactions, 15:7.

(2014)
Sulfidization of lacustrine glacial clay upon Holocene marine transgression (Arkona
Basin, Baltic Sea).
Geochimica et Cosmochimica Acta, 142, 75-94.


BOOK CHAPTER


PATENTS


PRESENTATIONS AT CONFERENCES


5. EMEC 5 (5th European Meeting on Environmental Chemistry), Bari, Italy, December 2004 – Oral Presentation “Novel Method of Inorganic Polysulfide Speciation Analysis in Natural Waters”.

7. ISEAC 34 (34th International Symposium on Environmental Analytical Chemistry), Hamburg, Germany, June 2006 – Oral Presentation “Speciation of Inorganic Polysulfide in Environmental Aquatic Samples.”


9. IWOMA (International Workshop on Marine Aggregates), Bremen, Germany, December 2006 – Poster and Oral Presentation “Formation and Coagulation of Colloidal Sulfur in Wadden Sea Tidal Flat Pools”.


18. 24th International Meeting on Organic Geochemistry, Bremen, Germany, September 2009 – Poster Presentation.

20. Goldschmidt – 2010, Knoxville, Tennessee, USA, June 2010 – Oral Presentation “Solubility of α-S\textsubscript{8} in water as a function of temperature, salinity and sulfide concentration”.


23. Goldschmidt – 2011, Prague, Czech Republic, August 2011 – Oral Presentation “Multiple sulfur isotope fractionation during sulfur cycling in a warm, monomictic lake with sub-millimolar sulfate concentration”.

24. Isranalytica – 2012, Tel Aviv, Israel, January 2012 – Keynote Oral Presentation "Quantification of free and metal-complexed cyanide by tetrathionate derivatization".


31. Annual Meeting of the Israel Chemical Society, Tel-Aviv, Israel, February 2015 - Oral Presentation "Biogeochemical sulfur transformations in modern and ancient aquatic systems: Multiple isotope approach."

33. EMBO Workshop on Microbial Sulfur Metabolism, Helsingør, Denmark, April 2015 - Poster Presentation.


**INVITED SEMINARS**

1. November 2004 – Max Planck Institute for Marine Microbiology, Bremen, Germany
2. October 2006 – Wageningen University, Wageningen, Netherlands
3. April 2007 – Technion, Haifa, Israel
4. April 2007 – Israel Oceanographic and Limnological Research, Haifa, Israel
5. April 2007 – Hebrew University, Jerusalem, Israel
6. April 2007 – Ben-Gurion University, Sde-Boker, Israel
7. October 2008 – University of Delaware, Lewes, DE, USA
8. September 2009 – Institute “Rudjer Bošković”, Zagreb, Croatia
9. December 2009 – Hebrew University, Jerusalem, Israel
10. December 2009 – Weizmann Institute of Science, Rehovot, Israel
11. January 2010 – Eilat Interuniversity Institute, Eilat, Israel
12. November 2010 – Weizmann Institute of Science, Rehovot, Israel
14. November 2011 – The Yigal Allon Kinneret Limnological Laboratory, Migdal, Israel
15. April 2014 – The Yigal Allon Kinneret Limnological Laboratory, Migdal, Israel
16. December 2014 – Hebrew University, Jerusalem, Israel
18. June 2015 – Eilat Interuniversity Institute, Eilat, Israel