

## **ZEEV GROSS**

Date and place of birth: September 27, 1954, Afula - Israel.

Web site: <http://chemistry.technion.ac.il/members/zeev-gross>; phone number +972-4-8293954

### **ACADEMIC DEGREES**

Ph.D.: 1987, Chemistry, Bar Ilan University

M.Sc.: 1982, Chemistry, Bar Ilan University

B.Sc.: 1979, Chemistry, Bar Ilan University

### **ACADEMIC APPOINTMENTS**

Princeton University, Fulbright Postdoctoral Fellow, 6/1988-9/1990

Schulich Faculty of Chemistry, Technion, from 1990-present; Full professor since 2002; R.M. & R.D.

Blum Professor since 2004

California Institute of Technology, visiting scientist: 1999, 2009, 2018, 1 semester each

### **RESEARCH INTERESTS**

- *Inorganic Chemistry*: Unique Coordination Chemistry of Corroles and Sapphyrins
- *Bioinorganic Chemistry*: Design of Bio-inspired Catalysts for Electro- and Photo-Catalysis, with focus on sustainable processes
- *Medicinal Inorganic Chemistry*: Introduction of New Metallodrugs and Strategies for Defeating Cancer, Diabetes Complications, and the Prevention of Cardiovascular and Neurodegenerative Diseases

### **AWARDS and HONORS (last 8 years only)**

Moore Distinguished Scholar, Caltech, 2014; Israel Chemical Society Award for the Outstanding Scientist, 2014 (*unshared*, the first ever); Xingda Lecture, Peking University, 2014; Resnick Distinguished Lecture, Caltech, 2017; Mahler Lecture, Univ. of Texas at Austin, 2018; Invitational Fellowship for Research in Japan (JSPS), 2018; Hans Fischer Career Award in Porphyrin Chemistry, 2018

### **OUTREACH ACTIVITIES**

- Chairman of *Archimedes*, Academic-credit Chemistry courses to high school pupils, 2012-present.
- Chairman of the national Chemistry Olympiad, *Chimiada*, 2012 – present.
- Chairman of the Israeli team for the *International Chemistry Olympiad (IChO)*, 2012-present.
- Chairman of the Israeli team for the *Mendeleev Chemistry Olympiad*, 2017-present.
- Dean, Division of External & Continuing Studies, 2015-2021

### **INTERNATIONAL CONFERENCES ORGANIZER (last 7 years only)**

- The “Energy” and “Photo- and Electro-Catalytic Processes” sessions for the 8<sup>th</sup>-11<sup>th</sup> *International Conference on Porphyrins and Phthalocyanines*, in 2014 (Istanbul), 2016 (Nanjing), 2018 (Munich) 2021 (virtual), 2022 (Madrid). *Member of the newly established International Scientific Committee.*
- Schulich Winter School on “*Frontiers in Inorganic Chemistry*”, Technion, December 1-3, 2015.
- The 1<sup>st</sup> Israel-Japan conference on *Catalysis for the Benefit of Society*, Technion, November 2-6, 2018.
- “Chemistry for a Sustainable Future”, Technion, May 9-12, 2023

### **PUBLICATIONS, Patents & Conferences**

238 scientific publications, with 10 cited > 200 times and 40 > 100 times (web of science data)

7 approved patents, 2 pending patents

> 100 invited, keynote, and plenary lectures in international conferences

### **5 RELEVANT RECENT PUBLICATIONS (without journal details)**

- Corroles: The Hitherto Elusive Parent Macrocyclic and its Metal Complexes (2021)
- Trifluoromethyl Hydrolysis En Route to Corroles with Increased Druglikeness (2021)
- Hydrogen Evolution Catalyzed by Corrole-Chelated Nickel Complexes, Characterized in all Catalysis-relevant Oxidation States (2022)
- Doubly Stimulated Corrole for Organelle-Selective Anti-Tumor Cytotoxicity (2022)
- Corrole nanoparticles for chemotherapy of castration resistant prostate cancer and as sonodynamic agents for treatment of pancreatic cancer (2023)