

## RESUME

Full name: Zeev Gross

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

Web sites: <http://chemistry.technion.ac.il/members/zeev-gross>, <https://zeevgross.net.technion.ac.il/>

### 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

Technion, Dean of external & continuing studies (4,000 students annually), 2015-2021

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

### RESEARCH INTERESTS

- *Inorganic Chemistry*: Unique Coordination, Photophysical and Electrochemical Properties of Corroles
- *Bioinorganic Chemistry*: Reaction Mechanism of Biological Catalytic Processes and the Design of Biomimetic Catalysts for Electro- and Photo-Catalysis
- *Medicinal Chemistry*: Introduction of New Metallodrugs and Strategies for Defeating Cancer, Diabetes Complications, and the Prevention of Cardiovascular and Neurodegenerative Diseases

### AWARDS and HONORS (2018-2023 only)

- Invitational Fellowship for Research in Japan (JSPS), 1/2018
- Hans Fischer Career Award in Porphyrin Chemistry, 7/2018
- Israel Chemical Society Gold Medal, 2022
- Cooper Award for Excellence in Research, 2023

### PUBLICATIONS, Patents & Conferences (as of mid 2023)

241 scientific publications: 15 with > 200 citations

10 approved patents

100 invited, keynote, and plenary lectures in international conferences

### SELECTED RECENT PUBLICATIONS (as of mid 2023)

- A. Mahammed and Z. Gross "Milestones and Most Recent Advances in Corrole's Science and Technology", *J. Am. Chem. Soc.* **2023**, *145*, 12429–12445.
- M. Soll, V. K. Sharma, S. Khoury, Y. G. Assaraf and Z. Gross "Corrole nanoparticles for chemotherapy of castration resistant prostate cancer and as sonodynamic agents for treatment of pancreatic cancer" *J. Med. Chem.* **2023**, *66*, 766–776.
- V. K. Sharma, Y. G. Assaraf, and Z. Gross "Hallmarks of anticancer and antimicrobial activities of corroles", *Drug Resistance Updates* **2023**, *67*, 100931 (18 pages).
- A. Kumar, D. Kim, A. Kumar, A. Mahammed, D. G. Churchill, and Z. Gross "Milestones in Corrole Chemistry: Historical Ligand Syntheses and Post-functionalization" *Chem. Soc. Rev.* **2023**, *52*, 573-600.
- Q.-C. Chen, S. Fite, N. Fridman, B. Tumanskii, A. Mahammed, and Z. Gross "Hydrogen Evolution Catalyzed by Corrole-Chelated Nickel Complexes, Characterized in all Catalysis-relevant Oxidation States", *ACS Catalysis* **2022**, *12*, 4310–4317.
- A. Kumar, P. Yadav, M. Majdoub, I. Saltsman, N. Fridman, S. Kumar, A. Kumar, A. Mahammed and Z. Gross "Corroles: The Hitherto Elusive Parent Macrocyclic and its Metal Complexes" *Angew. Chem.* **2021**, *60*, 25097-25103.