

Omer Yehezkeli - CV

Omer Yehezkeli earned his Ph.D. in Chemistry from the Hebrew University of Jerusalem under the mentorship of Prof. Itamar Willner. Following this, he joined the laboratory of Prof. Jennifer N. Cha in the Department of Chemical and Biological Engineering at the University of Colorado, Boulder, where he was awarded The American Institute of Chemist Post-Doctoral Award in recognition of his research.

Since October 2017, Omer has been a faculty member at the Faculty of Biotechnology and Food Engineering at the Technion – Israel Institute of Technology. In November 2023, he was promoted to the rank of Associate Professor with tenure. His contributions to the field were further celebrated in 2023, when he received both the Daniel Shiran Biomedical Innovation Award and the Hershel Rich Technion Innovation Award.

Omer's lab leads multidisciplinary research, utilizing bioengineering and (photo)electrochemistry as primary tools. The core of his work lies at the interface between biological and abiotic materials systems, where he pioneers advancements in biosensing, bioelectrosynthesis, and sustainable energy applications.

Candidate Statement

I am excited to submit my candidacy for the 2025 Chair of the Bioelectrochemistry Division.

I have been a member of the bioelectrochemistry community since 2006 when I first began conducting research in this field. My multidisciplinary lab focuses on bioelectrochemistry and nanotechnology. We use the unique properties of nanomaterials (electrical, optical) in conjugation with enzymes to gain a synergetic effect in catalysis and sensing. We aim to construct novel biohybrid systems with unnatural triggers for enzyme activation. To achieve this, we use electrodes or nanomaterials that allow directed or mediated electron transfer into the enzyme's active sites. You may find more information on my website: <https://yehezkeli.net.technion.ac.il/>

Over the past 15 years, I have witnessed remarkable advancements by division members. Classical research has evolved with innovative tools and fresh concepts, greatly enriching our collective knowledge. As Chair, I am committed to continuing this course of growth and innovation. I aim to enrich our community by encouraging researchers from adjacent fields such as synthetic biology, bioengineering, and bio-convergence, to contribute

their expertise to bioelectrochemistry. By fostering collaboration across different disciplines, we can unlock new opportunities for innovation and exploration.

My goal is to maintain the Division's diversity and inclusiveness while ensuring it continues to thrive.

Sincerely,

Omer Yehezkeli