Renana Gershoni Poranne

Assistant Professor

Schulich Faculty of Chemistry – Technion, Israel

☐ rporanne@technion.ac.il

☐ https://poranne-group.github.io/

Professional Experience

September 2024

since 2021 Assistant Professor Technion – Israel Institute of Technology

since 2019 Branco Weiss Fellow ETH Zürich, Technion – Israel Institute of Technology

2017-2021 Group Leader / "Habilitandin" within the group of Prof. Peter Chen, ETH Zürich

2015-2017 Postdoctoral Researcher with Prof. Peter Chen, ETH Zürich

Education

2010-2015 Ph.D. — Schulich Faculty of Chemistry, Technion, Israel.

Thesis: *Aromatic Systems*

Advisor: Prof. Amnon Stanger

2007-2010 M.Sc. (Summa cum Laude) — Schulich Faculty of Chemistry, Technion, Israel.

Thesis: Novel Corannulene-Aryl Ethers as Pentagonal Building Blocks for Superstructures

Advisor: Prof. Ehud Keinan

2004-2007 B.Sc. (*Summa cum Laude*) — Schulich Faculty of Chemistry, Technion, Israel.

Major: Molecular Biochemistry

Fellowships

2022 Alon Scholarship – Integration of Outstanding Faculty

2021 Horev Fellowship – Leaders in Science and Technology

2019 Branco Weiss Fellowship – Society in Science

2016-2018 The VATAT Fellowship for Excellent Female Post-Doctoral Scholars

2012-2014 The Schulich Fellowship for Excellence in Graduate Studies – Ph.D.

2007-2009 The Schulich Fellowship for Excellence in Graduate Studies – M.Sc.

Honors and Awards

2024 The Krill Prize for Excellence in Scientific Research, presented by the Wolf Foundation

2023-2024 Commendation for Excellence in Teaching (Principles of Chemistry A, Technion)

2021 Golden Owl Award for Excellence in Teaching (*OC4*: *Molecular Orbital Theory*, ETH Zurich)

2018 Junior Scientist Participation award to attend the '53rd Bürgenstock Conference'

2017 Poster Award at GRC Physical Organic Chemistry; Poster chosen for talk

2015 The Weissman and Jacknow Prize for Continued Excellence in Teaching

2014 The Schulich Prize for Excellence in Teaching

2014 Vivian Konigsberg Award for Continued Excellence in Teaching

2013 Selected to be a participant in the 63rd Lindau Nobel Laureates Meeting (Chemistry)

2013 Selected to be a participant in the 1st Global Young Scientists Summit, Singapore

2013 Sandor Szego Award for Excellence in Teaching

2012 The Schulich Prize for Excellence in Teaching
2010 Sandor Szego Award for Excellence in Teaching
2009 Sandor Szego Award for Excellence in Teaching
2009 The Schulich Prize for Excellence in Teaching
2008-2009 Sharett Foundation Scholarship for Excellence in Music – Singing
2008 Vivian Konigsberg Award for Excellence in Teaching
2007 Schulich Prize for Excellence in Undergraduate Studies
2007 Knesset (Israeli Parliament) Award for Excellent Undergraduate Students
2007-2008 Sharett Foundation Scholarship for Excellence in Music – Singing (with distinction)
2004-2007 President of the Technion's Award for Excellence in Studies, 5 semesters (top 3%)

Grants

2023-2027 Israel Science Foundation - Personal Grant *1,080,000 NIS*

2023-2024 Aviad Philipp (Technion, joint project with Computer Science)

2023-2024 Sahar Sagy (Technion)2023-2024 Omri Altman (Technion)2024 Yaara Pelleg (Technion)

2023-2027 Israel Science Foundation - New Faculty Equipment Grant 750,000 NIS

2019-2024 Branco Weiss Fellowship 500,000 CHF

Supervision of Students and Coworkers

```
Postdoctoral Fellows.....
  current Dr. Katarzyna Mlodzikowska-Pienko Azrieli Postdoctoral Fellow
  current Dr. Sabyasachi Chakraborty
Ph.D. Theses
 2019-2023 Alexandra Wahab (ETH Zürich)
M.Sc. Theses
  current Itay Almog (Technion)
  current Eduardo Mayo (Technion)
  current Fatimah Khaleel (Technion)
 2019-2020 Stefan Feusi (ETH Zürich)
 2016-2017 Eno Paenurk (ETH Zürich)
M.Sc. Semester Projects
     2022 Joel Landis (ETH Zürich)
     2021 Dominic Egger (ETH Zürich)
     2020 Lara Pfuderer (ETH Zürich)
     2019 Greta Markert (ETH Zürich)
     2019 Stefan Feusi (ETH Zürich)
     2018 Patrick Finkelstein (ETH Zürich)
B.Sc. Semester Projects
 2023-2024 Yair Davidson (Technion, joint project with Computer Science)
```

Teaching Experience – Summarized

As Lecturer at Technion.....

Since 2024 Lecturer – Applied Computational Chemistry

Since 2022 Lecturer – *Principles of Chemistry A*

Since 2022 Lecturer – Molecular Orbitals in Organic Chemistry

As Lecturer at ETH Zurich.....

2018-2021 Lecturer – Organic Chemistry IV: Physical Organic Chemistry

As Teaching Assistant at Technion

2009-2015 Senior Teaching Assistant – Principles of Chemistry A; Principles of Chemistry B; Organic Chemistry Expanded 1; Organic Chemistry Expanded 2; Structure Determination by Physical Methods

2008-2009 Teaching Assistant and Lab Instructor – *Principles of Chemistry A; Principles of Chemistry B*

Oral Presentations at International Conferences

27. (Upcoming – Invited Talk) **WATOC 2025** *Erlangen, Germany* — June, 2025

- 26. (Upcoming Plenary Talk) **The 37th Molecular Modelling Workshop 2025** *Erlangen, Germany* March, 2025
- 25. (Upcoming Invited Talk) **Aromaticity2025** *Merida, Mexico* January, 2025
- (Upcoming Invited Talk) Materials Research Society: Next-generation AI-Catalyzed Scientific Workflow for Digital Materials Discovery Massachusetts, USA — December, 2024
- 23. (Invited Visiting Lectureship) Liebig College *Giessen*, *Germany* September, 2024
- 22. (Invited Talk) **International Symposium on Novel Aromatics (ISNA 24)** *Toronto, Canada* August
- 21. (Invited Talk) **Gordon Research Conference Crystal Engineering Meets AI** *Maine, USA* June, 2024
- 20. (Invited Talk) **Challenges in Computational Homogeneous Catalysis (Chemistry@Sete)**Sete, France June, 2024
- 19. (Invited Talk) **Chemical Compound Space Conference** *Heidelberg, Germany* May, 2024
- 18. (Invited Talk) **The 10th Virtual Winter School of Computational Chemistry** *Online* January, 2024
- (Invited Talk) ELLIS ML4Molecules Workshop Online — December, 2023
- 16. (Invited Talk) **The Beilstein Symposium on Organic Chemistry** *Limberg, Germany* November, 2023
- 15. (Invited Talk) **European Symposium on Organic Reactivity** *Amsterdam, The Netherlands* September, 2023
- 14. (Invited Talk) **Gordon Research Conference Physical Organic Chemistry** *Holderness*, *NH*, *USA* June, 2023

- 13. (Invited Talk) **SIMPLAIX Workshop on "Machine Learning for Multiscale Molecular Modeling** *Heidelberg, Germany* May, 2023
- 12. (Invited Talk) **The 3rd "Carbon" Fusion Conference** *Tulum, Mexico* May, 2023
- 11. (Invited Talk) The 2nd International Conference on Excited State Aromaticity and Antiaromaticity *Hawaii, USA* December, 2022
- 10. (Invited Talk) **The Batsheva de Rothschild Seminar on Strong Bond Activation** *Ein Gedi, Israel* October, 2022
- 9. (Invited Talk) **The MAGIC Workshop** *Cambridge, United Kingdom* September, 2022
- 8. (Invited Talk) **WATOC**, the 12th Triennial Congress *Vancouver*, *Canada* July, 2022
- 7. (Invited Talk) **International Conference on Excited State Aromaticity and Antiaromaticity** *Sigtuna, Sweden* September, 2019
- 6. (Invited Talk) **Aromaticity 2018** *Riviera Maya, Mexico* November, 2018
- 5. International Symposium on Reactive Intermediates and Unusual Molecules (ISRIUM) *M. Verita, Switzerland* May, 2018
- 4. **IUPAC** International Conference on Physical Organic Chemistry (ICPOC) *Faro, Portugal* July, 2018
- 3. (Poster Prize Talk) **Gordon Research Conference on Physical Organic Chemistry** *Holderness, NH, USA* June, 2017
- 2. Schulich Graduate Students Symposium *Haifa, Israel* December, 2014
- 1. Lise Meitner Minerva Center for Computational Chemistry Symposium *Jerusalem, Israel* — 2012

Invited Seminar Presentations

- 2025 University of Oregon, Eugene planned for February, 2025
- **2025** UC Berkeley planned for February, 2025
- 2024 Justus Liebig University, Giessen
- 2024 Uppsala University
- 2024 Stockholm University
- 2024 Hebrew University in Jerusalem
- 2024 Ben-Gurion University of the Negev
- 2023 University of Zurich
- 2023 University of Helsinki
- 2023 ETH Zurich
- 2021 Polish Academic of Sciences presented online
- **2021** Massachusetts Institute of Technology presented online
- **2021** Florida State University presented online
- 2019 Vrije Universiteit Amsterdam

Academic Contributions

Editorial Activities...

- Since 2023 Associate Editor of The Journal of Physical Organic Chemistry
- Since 2020 Member of the Editorial Advisory Board of ChemistryOpen
- 2024-2025 Co-editor of the Prof. Dr. Peter Chen Festschrfit, published by Helvetica Chimica Acta
- **2021-2022** Co-editor of the Rosarium Philosophorum on Computational Chemistry, published by the Israel Journal of Chemistry

Organization of Conferences.

- 2024-2025 Co-organizer of the Symposium in Honor or Prof. Dr. Peter Chen. Zurich, July 2025.
- **2023-2024** Co-director of the 3rd International Conference on Excited State Aromaticity and Antiaromaticity. Croatia, July 2024.
- **2024-2025** Member of the Scientific Advisory Board of the 4^{th} International Conference on Excited State Aromaticity and Antiaromaticity
- **2023-2024** Member of the Scientific Advisory Board of the 3rd International Conference on Excited State Aromaticity and Antiaromaticity
 - **2022** Member of the Scientific Advisory Board of the 2nd International Conference on Excited State Aromaticity and Antiaromaticity
- 2021-2022 Member of the Scientific Committee of the European Young Chemists' Meeting 2022
- 2011-2013 Chairperson of the Organizing Committee, 5th, th and 7th Schulich Graduate Symposium
- 2009-2010 Member of the Organizing Committee, 3rd and 4th Schulich Graduate Symposium

Reviewing Activities.....

Since 2018 Reviewer for internationally recognized journals (70 individual manuscripts reviewed):

- Nature Chemistry
- Nature Reviews Chemistry
- Nature Computational Science
- o Journal of the American Chemical Society
- Chemical Science
- o Angewandte Chemie
- O Chemistry a European Journal
- ChemistryOpen
- Israel Journal of Chemistry
- o *Journal of the American Society for Mass Spectrometry*
- o Journal of Chemical Information and Modeling
- Journal of Computational Chemistry
- Journal of Chemical Theory and Computation
- Advanced Materials
- Cell Reports Physical Science

- Frontiers in Inorganic Chemistry
- Organometallics
- Tetrahedron
- Organic and Biomolecular Chemistry
- Organic Letters
- Journal of Organic Chemistry
- European Journal of Organic Chemistry
- o Journal of Physical Organic Chemistry
- Physical Chemistry Chemical Physics
- o Journal of Chemical Physics
- Journal of Physical Chemistry
- o Journal of Physical Chemistry Letters
- Chemical Physics Letters
- Digital Discovery

Since 2018 Reviewer for internationally recognized journals funding agencies:

- o Natural Sciences and Engineering Research Council of Canada
- Petroleum Research Fund (USA)
- Swiss National Science Foundation

Departmental Activities

Since 2024 Academic in charge of departmental Colloquiua

- Since 2023 Member of the departmental Teaching Committee
- Since 2022 Academic in charge of the Computational Chemistry service laboratory
- 2022-2024 Academic in charge of Organic/Inorganic Seminars

Outreach Activities.....

- 2024 Technion Ambassadors program
- **2024** Technion Representative in the *Network of Excellence for Women PhD Students*, supported by AFIK in Academia Israeli Women University Professors' Forum
- 2024 Judge in Chemistry Tournament for high school students
- 2024 Scientific Lecture to Chemistry Olympiad students
- **2023** Invited speaker for mentorship session and panel discussion with PhD and Postdocs, Gordon Research Conference on Physical Organic Chemistry
- 2023 Invited speaker for mentorship panel for graduating PhDs, Technion
- 2023 Invited Speaker for "Global Women's Day" at ICON Plc. Company
- 2020 Member of panel "Portrait of a Working Mother", discussing women in academia, ETH Zurich
- **2019** Member of panel "How to Survive Your PhD", discussing the experience of female PhD students, ETH Zurich
- 2018-2019 Vice-Chairperson of the Society for Women in Natural Sciences, ETH Zurich