

Eden Gaster

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ACADEMIC EDUCATION

Yale University, New Haven, CT, USA 2022-2026
Post-doc associate, Chemistry Department
Supervisor: Prof. Scott J. Miller

Ben-Gurion University, Be'er Sheva, Israel 2016-2020
Ph.D., Chemistry Department
Supervisor: Prof. Doron Pappo
Dissertation title: Development of Metal-Catalyzed Oxidation Reactions in 1,1,1,3,3,3-Hexafluoropropan-2-ol

Ben-Gurion University, Be'er Sheva, Israel 2014-2015
M.Sc., Chemistry Department
Supervisor: Prof. Doron Pappo

PUBLICATION LIST

- **Gaster, E.**[‡]; Slocumb, H. S.[‡]; Jurić, Z.; Myers, T. E.; Lim, N.-K.; Malig, T. C.; Toste, F. D.; Gosselin, F.; Sigman, M. S.; Miller, S. J. Assessment of Complementary Catalysts in an Uncharted Enantioselective Reaction of Sulfondiimines. *Submitted*.
- Haas, B. C.; Lim, N.-K.; Jermaks, J.; **Gaster, E.**; Guo, M. C.; Malig, T. C.; Werth, J.; Zhang, H.; Toste, F. D.; Gosselin, F.; Miller, S. J.; Sigman, M. S. Enantioselective Sulfonimidamide Acylation via a Cinchona Alkaloid-Catalyzed Desymmetrization: Scope, Data Science, and Mechanistic Investigation. *Journal of the American Chemical Society* **2024**, *146* (12), 8536-8546. DOI: 10.1021/jacs.4c00374.
- Libman, A.; Ben-Lulu, M.; **Gaster, E.**; Bera, R.; Shames, A. I.; Shaashua, O.; Vershinin, V.; Torubaeu, Y.; Pappo, D. Multicopper Clusters Enable Oxidative Phenol Macrocyclization (OxPM) of Peptides. *Journal of the American Chemical Society* **2023**, *145* (38), 21002-21011. DOI: 10.1021/jacs.3c06978.
- Mintz, T.[‡]; More, N. Y.[‡]; **Gaster, E.**; Pappo, D. Iron-Catalyzed Oxidative Cross-Coupling of Phenols and Tyrosine Derivatives with 3-Alkyloxindoles. *The Journal of Organic Chemistry* **2021**, *86* (24), 18164-18178. DOI: 10.1021/acs.joc.1c02435
- Ben-Lulu, M.[‡]; **Gaster, E.**[‡]; Libman, A.; Pappo, D. Synthesis of Biaryl-Bridged Cyclic Peptides via Catalytic Oxidative Cross-Coupling Reactions. *Angewandte Chemie International Edition* **2020**, *59* (12), 4835-4839. DOI: 10.1002/anie.201913305.
Highlighted in Synfacts 2020, 16(03), 0351. [Synfact of the Month]
- **Gaster, E.**; Kozuch, S.; Pappo, D. Selective Aerobic Oxidation of Methylarenes to Benzaldehydes Catalyzed by N-Hydroxyphthalimide and Cobalt(II) Acetate in Hexafluoropropan-2-ol. *Angewandte Chemie International Edition* **2017**, *56* (21), 5912-5915. DOI: 10.1002/anie.201702511. **Selected as a Very Important Paper.** Highlighted in *Angewandte Chemie International Edition*.: Lumb, J.P. Stopping Aerobic Oxidation in Its Tracks: Chemoselective Synthesis of Benzaldehydes from Methylarenes. *Angewandte Chemie International Edition*, **2017**, *56*(32), 9276–9277. DOI: 10.1002/anie.201704160

- **Gaster, E.**[‡]; Vainer, Y.[‡]; Regev, A.; Narute, S.; Sudheendran, K.; Werbeloff, A.; Shalit, H.; Pappo, D. Significant Enhancement in the Efficiency and Selectivity of Iron-Catalyzed Oxidative Cross-Coupling of Phenols by Fluoroalcohols. *Angewandte Chemie International Edition* **2015**, 54 (14), 4198-4202. DOI: 10.1002/anie. 201409694.

HONORS AND AWARDS

- **Zuckerman Postdoctoral Fellowship** 2023
Yale University, New Haven, CT, USA
Awarded to support outstanding postdoctoral researchers in STEM fields, fostering collaboration between scholars in the United States and Israel.
- **Rector Award for Excellence in Ph.D.** 2020
Ben-Gurion University, Be'er Sheva, Israel
Received for outstanding academic performance and research contributions at Ben-Gurion University of the Negev.
- **Adama Award for Excellence in Ph.D.** 2018
Ben-Gurion University, Be'er Sheva, Israel
Recognized for significant contributions to the field of organic chemistry.
- **Negev-Faran Fellowship** 2016
Ben-Gurion University, Be'er Sheva, Israel
Awarded for exceptional academic and research achievements in chemistry.