# Bryan R. Goldsmith

**Affiliation:** Department of Chemical Engineering, University of Michigan, Ann Arbor
**Address:** B28-2044W North Campus Research Complex
2800 Plymouth Road, Ann Arbor
**E-mail:** bgoldsm@umich.edu
**Website:** https://cheresearch.engin.umich.edu/goldsmith/

## Education

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| 2010 – 2015 | Ph.D. Chemical Engineering, University of California Santa Barbara |
| 2006 – 2010 | B.S. *with honors and distinction* in Chemical Engineering, University of California Riverside |

## Professional Career

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| 9/2023 – Present | Associate Professor, University of Michigan, Department of Chemical Engineering. & Associate Chair for Graduate Education (8/2024 – Present) |
| 9/2017 – 9/2023 | Assistant Professor, University of Michigan, Department of Chemical Engineering |
| 8/2015 – 8/2017 | Humboldt Postdoctoral Fellow, Fritz Haber Institute of the Max Planck Society, Theory Department, Berlin, Germany. Director: Matthias Scheffler |

## Selected Publications

1. Interpretable machine learning for knowledge generation in heterogeneous catalysis, J. A. Esterhuizen, B. R. Goldsmith, S. Linic, *Nat. Catal.* 5, 174 (2022).
2. Activity and selectivity trends in electrocatalytic nitrate reduction on transition metals, J.-X. Liu, D. Richards, N. Singh, B. R. Goldsmith, *ACS Catal.* 9, 7052 (2019).
3. Machine learning for heterogeneous catalyst design and discovery, B. R. Goldsmith, J. Esterhuizen, C. J. Bartel, C. Sutton, J.-X. Liu, *AIChE J.*, 64, 2311 (2018).
4. H. Scott Fogler, B. R. Goldsmith, E. Nikolla, N. Singh (2024). *Elements of Chemical Reaction Engineering* (7th ed.) Pearson Education [link]

## Research Interests

Understanding catalysts and materials via computational modeling to advance sustainable chemical processes, environmental remediation, and energy production. Energy · Environment · Heterogeneous Catalysis · Electrocatalysis · First-Principles Modeling · Molecular Simulation · Machine Learning

## Awards

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| 2023 | 1938E Award (College of Engineering at the University of Michigan, one per year) |
| 2023 | NSF CAREER Award |
| 2022 | ACS OpenEye Outstanding Junior Faculty Award in Computational Chemistry |
| 2022 | Featured as a “Movers & Shakers” in Catalysis, The Catalyst Review magazine |
| 2020 | AIChE 35 under 35 Award |
| 2020 | Dow Corning Assistant Professorship in Chemical Engineering |
| 2017 | U.S. Delegate to the 67th Lindau Nobel Laureate Meeting on Chemistry |