

Reagan Hooper

Postdoctoral Scholar, Photon Science, SLAC

Bio

PROFESSIONAL EDUCATION

- Ph.D., Yale University , Chemistry (2023)
- B.S., Kennesaw State University , Chemistry (2018)

STANFORD ADVISORS

- Kelly Gaffney, Postdoctoral Faculty Sponsor
- Amy Cordones-Hahn, Postdoctoral Research Mentor

Publications

PUBLICATIONS

- **Iron(IV) alkyl complexes: electronic structure contributions to Fe-C bond homolysis and migration reactions that form N-C bonds from N₂.** *Chemical science*
Bhutto, S. M., Hooper, R. X., McWilliams, S. F., Mercado, B. Q., Holland, P. L.
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- **Evaluating Diazene to N₂ Interconversion at Iron-Sulfur Complexes.** *Chemistry (Weinheim an der Bergstrasse, Germany)*
Hooper, R. X., Wertz, A. E., Shafaat, H. S., Holland, P. L.
2024: e202304072
- **Desulfurization and N₂ Binding at an Iron Complex Derived from the C-S Activation of Benzothiophene.** *Organometallics*
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2023; 42 (15): 2019-2027
- **Engineering Band Gap and Photoconduction in Semiconducting Metal Organic Frameworks: Metal Node Effect** *JOURNAL OF PHYSICAL CHEMISTRY LETTERS*
Nyakuchena, J., Ostresh, S., Neu, J., Streater, D., Cody, C., Hooper, R., Zhang, X., Reinhart, B., Brudvig, G. W., Huang, J.
2023; 14 (26): 5960-5965
- **Mechanism of Nitrogen-Carbon Bond Formation from Iron(IV) Disilylhydrazido Intermediates during N₂ Reduction** *JOURNAL OF THE AMERICAN CHEMICAL SOCIETY*
Bhutto, S. M., Hooper, R. X., Mercado, B. Q., Holland, P. L.
2023: 4626-4637
- **Cobalt-Carbon Bonding in a Salen-Supported Cobalt(IV) Alkyl Complex Postulated in Oxidative MHAT Catalysis** *JOURNAL OF THE AMERICAN CHEMICAL SOCIETY*
Wilson, C., Kim, D., Sharma, A., Hooper, R. X., Poli, R., Hoffman, B. M., Holland, P. L.
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- **Iron Complexes of a Proton-Responsive SCS Pincer Ligand with a Sensitive Electronic Structure** *INORGANIC CHEMISTRY*
Skubi, K. L., Hooper, R. X., Mercado, B. Q., Bollmeyer, M. M., MacMillan, S. N., Lancaster, K. M., Holland, P. L.
2022; 61 (3): 1644-1658
- **Assignment of Infrared-Active Combination Bands in the Vibrational Spectra of Protonated Molecular Clusters Using Driven Classical Trajectories: Application to N₄H⁺ and N₄D⁺** *JOURNAL OF PHYSICAL CHEMISTRY A*

Hooper, R., Boutwell, D., Kaledin, M.

2019; 123 (26): 5613-5620

● **A stable Cerberus tris(maloNHC) and its coinage metal complexes** *CHEMICAL COMMUNICATIONS*

Hooper, R., Mason, A., Montgomery, M., Clinebell, B., Gaynor, R., McMillen, C., Tapu, D.

2019; 55 (42): 5942-5945