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Wenping Zou

Research Interest:

Biochemistry, Microbiology, Bioinformatics, Fluorescence Sensor

EDUCATION:

- Ph. D. Chem. (*Bioinorganic Chem.*), University of Houston (UH), Aug. 2022
- M. S. Chem. (Chem.), University of Science & Technology of China (USTC), Jun. 2017
- B. S. Chem. (Chem), HeFei University of Technology (HFUT), Jun. 2014

Research Experience:

- 09/2023-now Postdoctoral Research Fellow, Department of Public Health, UTHealth Houston, Advisor: Prof. Zhongming Zhao
 - Research Area & Topics
 - Bioinformatic, Drug synergy, Proteomics
- 09/2022-08/2023 Postdoctoral Research Fellow, Department of Chemical Engineering, University of Texas at Austin, Advisor: Prof. Benjamin (Keith) Keitz
 - Research Area & Topics
 - Synthetic Biology/ Metabolic Redox Catalysis
- 09/2017-07/2022 Research Assistant, Department of Chemistry, University of Houston, Advisor: Prof.

Melissa, L. Zastrow

- Research Area & Topics
 - Protein-based Fluorescence Resonance Energy Transfer (FRET) sensor/Oxygen-Independent Protein-based Fluorescent Sensors Design, Synthesis and Application
- 09/2014-06/2017 Research Assistant, Laboratory of Catalysts and Polyolefin, CAS Key Laboratory of Soft Matter Chemistry, USTC, Advisor: Prof. Changle Chen
 - Research Area & Topics
 - \circ Organometallics and Polyolefin/Late transition metal catalysts of polymerization (Catalysts with α -dimine ligands or phosphine-sulfonate ligands)

Research Program Participation

- National Institutes of Health R35 MIRA (No. 1R35GM138223, 2020-2025)
- UH High Priority Area Research SEED Grant (2020-2021)
- The Welch Foundation (No. E-1972-20180324, 2018-2021)
- National Nature Science Foundation of China (NSFC), 2014-2017

Computer Experience:

• Programming Skills -C programming language, Python, R-Studio, Machine Learning

SCHOLARSHIP

• 2016 National Scholarship (10%), Ministry of Education of China, 3000\$

- 2013 College Scholarship (30%), HFUT, 150\$
- 2012 National Scholarship (5%), Ministry of Education of China, 1000\$

TEACHING EXPERIENCE

- 09/2017- 12/2021 Teaching Assistant, Organic Lab I
- 03/2017-06/2017 Teaching Assistant, Organic Chemistry II
- 09/2015-01/2016 Teaching Assistant, Organic Chemistry I

PRESENTATIONS/POSTER/WORKSHOP

- 1. Oral presentation at ACS meeting. "Flavin-binding fluorescent proteins as platforms for designing new metal ion sensors" *Aug. 2022*
- 2. Poster on UH/Chem Campus Visit. "Cofactor Protein-based Fluorescent Sensors" Feb.2022
- 3. Student Seminar. "Cofactor-Based Fluorescent Proteins as Transition Metal Ion Probes for Oxygen-Independent Sensing" Sep. 2021
- 3. Poster at ACS meeting. "Oxygen-Independent Protein-based Fluorescent Sensors" Apr. 2021
- 4. Student Seminar, "Enzyme Evolution and Applications" Mar. 2019

Students Training

Khoa, Le (Undergraduate, *Current position: Ph. D, California Institute of Technology*) Amy, Vo (High School, *Current position: undergraduate, California Institute of Technology*) Christopher Shi (High School, *Current position: undergraduate, Rice University*)

PUBLICATIONS

1. **Wenping Zou**, and Benjamin K. Keitz "Ligands Facilitate Microbial Reduction of High-Loading Transition Metal Ions" *Manuscript preparation*

2. Makena K. Janis[†], **Wenping Zou**[†], Melissa L. Zastrow* A Single-Site Mutation Tunes Fluorescence and Chromophorylation of an Orange Fluorescent Cyanobacteriochrome. *ChemBioChem* 2023, *24*, e2023003.

3. Zhengpeng Yan, **Wenping Zou**, Shengyu Dai Unexpected o-aryl t Bu group effect on suppression of chain transfer in pyridine–imine Ni (ii) and Pd (ii) catalyzed ethylene (co) polymerization *Polymer Chemistry*, 2023 4. Huayin Sun, Huijun Fan, Chuangao Zhu, **Wenping Zou***, Shengyu Dai* Direct Synthesis of Partially Chain-Straightened Propylene Oligomers and P-MA Co-Oligomers Using Axially Flexible Shielded Iminopyridyl Palladium Complexes *Polymers*, 2022, 15, 111.

5. Wenping Zou, Hazel N. Nguyen, Melissa L. Zastrow* Mutant Flavin-Based Fluorescent Protein Sensors for Detecting Intracellular Zinc and Copper in *Escherichia coli*. ACS Sens. 2022, 7, 3369.

6. Wenping Zou, Khoa Le and Melissa L. Zastrow* Live-Cell Copper-Induced Fluorescence Quenching of the Flavin-Binding Fluorescent Protein CreiLOV. *ChemBioChem* 2020, 21, 1.

7. Wenping Zou, Wenmin Pang and Changle Chen* Redox control in palladium catalyzed norbornene and alkyne polymerization. *Inorganic Chemistry Frontiers* 2017, 4, 795.

8. Wenping Zou, Changle Chen* Influence of Backbone Substituents on the Ethylene (Co)polymerization Properties of α -diimine Pd(II) and Ni(II) Catalysts. *Organometallics* 2016, 35, 1794.

9. Min Chen, **Wenping Zou**, Zhengguo Cai and Changle Chen* Norbornene homopolymerization and copolymerization with ethylene by phosphinesulfonate nickel catalysts. *Polym. Chem.* 2015, 6, 2669.

REFERENCES

Prof. Melissa L. Zastrow	mzastrow@uh.edu
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Prof. Benjamin (Keith) Keitz	keitz@utexas.edu
Prof. Shengyu Dai	daiyu@ustc.edu.cn