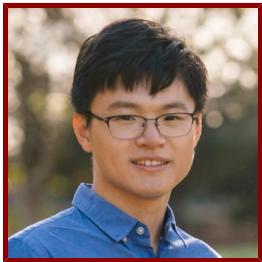


Stanford



Chu Zheng

Postdoctoral Scholar, Biochemistry

Curriculum Vitae available Online

Bio

HONORS AND AWARDS

- Student Research Achievement Award, The 67th Biophysical Society Annual Meeting (02/21/2023)
- Center for Molecular Analysis and Design (CMAD) Fellowship, Stanford University (09/01/2022)
- T. P. Hou Award, Tsinghua University (07/01/2016)
- Gold medalist in the 25th China National Chemistry Olympiad, Chinese Chemical Society (12/01/2011)

PROFESSIONAL EDUCATION

- Doctor of Philosophy, Stanford University , CHEM-PHD (2023)
- Bachelor of Science, Tsinghua University , Chemistry (2016)

Research & Scholarship

LAB AFFILIATIONS

- Peter Kim, The Kim Lab (4/7/2023)

Publications

PUBLICATIONS

- Enhanced active-site electric field accelerates enzyme catalysis. *Nature chemistry*
Zheng, C., Ji, Z., Mathews, I. I., Boxer, S. G.
2023
- A two-directional vibrational probe reveals different electric field orientations in solution and an enzyme active site. *Nature chemistry*
Zheng, C., Mao, Y., Kozuch, J., Atsango, A. O., Ji, Z., Markland, T. E., Boxer, S. G.
2022
- A unifying electrostatic basis for designing enzymes faster than natural ones
Zheng, C., Ji, Z., Mathews, I. I., Boxer, S. G.
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- Carbon-deuterium bonds as reporters of electric fields in solvent and protein environments. *Biophysical journal*
Fried, S. D., Kirsh, J. M., Zheng, C., Mao, Y., Markland, T. E., Boxer, S. G.
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- A unifying electrostatic basis for designing enzymes faster than natural ones. *Biophysical journal*
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● **Carbon-deuterium bonds as reporters of electric fields in solvent and protein environments**

Fried, S. E., Kirsh, J. M., Zheng, C., Mao, Y., Markland, T. E., Boxer, S. G.
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● **Solvent Organization and Electrostatics Tuned by Solute Electronic Structure: Amide versus Non-Amide Carbonyls.** *The journal of physical chemistry. B*

Fried, S. D., Zheng, C., Mao, Y., Markland, T. E., Boxer, S. G.
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● **Tuning solvent electrostatic environment of amide carbonyls as prototypical peptide backbones**

Fried, S. E., Zheng, C., Mao, Y., Markland, T. E., Boxer, S. G.
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● **A two-directional vibrational probe reveals the distinct electric field orientation at the active site of liver alcohol dehydrogenase**

Zheng, C., Mao, Y., Kozuch, J. A., Atsango, A. O., Ji, Z., Markland, T. E., Boxer, S. G.
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● **Testing the Limitations of MD-Based Local Electric Fields Using the Vibrational Stark Effect in Solution: Penicillin G as a Test Case.** *The journal of physical chemistry. B*

Kozuch, J., Schneider, S. H., Zheng, C., Ji, Z., Bradshaw, R. T., Boxer, S. G.
2021

● **Bimetallic cooperative effect on O-O bond formation: copper polypyridyl complexes as water oxidation catalyst** *DALTON TRANSACTIONS*

Su, X., Zheng, C., Hu, Q., Du, H., Liao, R., Zhang, M.
2018; 47 (26): 8670–75