

EDUCATION

| SEP.2023 – PRESENT | Graduate Student in Chemistry Department of Chemistry and Biochemistry <i>University of Maryland - College Park</i> |
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| JUL.2023 – DEC.2023 | Visiting Scholar Department of Chemistry <i>University of Wisconsin - Madison</i> |
| SEP.2020 – JUL.2024 | B.S. in Chemical Physics Department of Chemical Physics <i>University of Science and Technology of China</i> |

RESEARCH

Optimization of Protein Molecular Force Field Parameters Based on NMR Spectroscopy Data and Deep Learning Tools

Time: Dec. 2023 - May. 2024 Supervisor: Prof. Zhonghuai Hou, SCMS, USTC. Undergraduate Thesis

Ab Initio Raman Spectra Calculation

Time: Jul. 2023 - Dec. 2023 Supervisor: Prof. Yang Yang, TCI, UW-Madison Mid Report: Basic Theory of Raman Spectroscopy Final Report: Codes for Static Raman Calculation

Physicochemical Properties of Bio-Phase Transitions

Time: Nov. 2023 - Apr. 2023 Supervisor: Prof. Zhonghuai Hou, SCMS, USTC. Final Report: Liquid-Liquid Phase Separation

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- xuankecai@gmail.com
- https://github.com/Bessgendre
- 𝗞 https://bessgendre.github.io

LITERATURE

Book: Manual of Chem-Flyers 2024

A guidebook jointly compiled by students of USTC going abroad, focusing on the reasons and experiences of oversea studies. Printed Version at **library of USTC**, Digital Version at **ustcflyer.com**.

Article: The Analysis of Univ of Sci & Tech of China

Critical thoughts towards the rat race at our school, giving faith to Truth and Liberty. Available at **USTC Forum**.

Article: The Faults of Zhiyong

Reported the Org.Chem lecturer's misconducts to the Forum of Students and Teachers in classical Chinese. Available at **icourse.club**.

SELECTED AWARDS

- 2024 **USTC Fellowship, A-Level** University of Science and Technology of China
- 2023 Chen Linyi Scholarship Mr. Chen Linyi
- 2022 **Outstanding student scholarship** University of Science and Technology of China
- 2022 **Excellent Student Scholarship of GIES** *Guangzhou Institute of Energy Conversion, CAS*
- 2021 Huang Minglong Scholarship of SIOC Shanghai Institute of Organic Chemistry, CAS
- 2021 Scholarship of Lu Jiaxi Talent Program University of Science and Technology of China
- 2021 **2nd Prize, Chinese Mathematics Competition** *Chinese Mathematical Society*

SKILLS

| LANGUAGE | English, Chinese |
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| PROGRAMMING | Python, Mathematica |
| SOFTWARE | ETEX, LAMMPS, Adobe Photoshop |
| INSTRUMENT | Chinese Flute, Piano |