Zhe Liu

https://zheliu17.github.io

University of Alberta, Edmonton, Alberta, Canada

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Education

M.Sc. in Chemistry (Thesis/Research Based)

University of Alberta, Edmonton, Alberta, Canada   Sept. 2019 – Present

B.S. in Applied Chemistry

Dalian University of Technology, Dalian, P.R.China   Sept. 2015 – June 2019

Zhang Dayu School of Chemistry (Honors Track)

Research Experience (Details available at zheliu17.github.io)

University of Alberta, Edmonton, Canada

M.Sc. Thesis, (Advisor: Prof. Gabriel Hanna)   Nov. 2019 – Present

- Mixed quantum-classical Liouville dynamics in position representation

University of Calgary, Calgary, Canada

Research assistant, (Advisor: Prof. Peter Kusalik)   July 2018 – Oct. 2018

- Probing reactions of the hydroxyl radical in aqueous environments

Dalian Institute of Chemical Physics, Dalian, P.R. China

Research assistant, (Advisor: Prof. Hongjun Fan)   Jan. 2019 - June 2019

- Theoretical studies on the structures and properties of $TiO_2(110)$ surface adsorbed by single metal atom

Research assistant, (Advisor: Prof. Hongjun Fan)   June 2017 – June 2018

- Theoretical studies on the solvated structures and properties of lithium ions in dimethyl carbonate

Other Experience

Teaching Experience

CHEM 10X General Chemistry Experiments

Teaching Assistant   Jan. 2020 – Present

CHEM 303 Environmental Chemistry

Teaching Assistant, (Course Instructor: Prof. Julianne M Gibbs) Sep. 2019 – Dec. 2019

AIChE Chem-E-Car Competition

Team member, (Advisor: Prof. Hongguang Dong and Prof. Qing Mao) Feb. 2017 – Sept. 2017

- Designed and constructed of a car driven by chemical energy, which could safely deliver specified loads at specified distances and stops
- Developed a mathematical model to predict the time of iodine clock reaction

Select Awards and Scholarships

Globalink Graduate Fellowship, Mitacs	2019
Outstanding Graduates, Dalian University of Technology	2019
CSC (China Scholarship Council) scholarship, China Scholarship Council	2018
Second Place of China Division in the Chem-E-Car Competition, Chemical Industry and Engineering Society of China	2017
DICP scholarship, Dalian Institute of Chemical Physics	2015 - 2016, 2016 - 2017

Skills

Computational Chemistry: VASP, p4vasp, VESTA, CPMD, VMD, Gaussian, Gnuplot, LaTex

Programming: Bash Shell Script, MATLAB, Python, C