

Curriculum Vitae

Tiange Deng, Graduate Assistant
Department of Chemistry, Michigan State University
Chemistry Building, 578 S. Shaw Lane, Room 87
East Lansing, Michigan 48824-1322, USA
Email: dengtia4@msu.edu

Education

2021 - Present, pursuing Ph.D. in Theoretical & Computational Chemistry at Michigan State University. Advisor: Professor Piotr Piecuch.

2015 - 2019, B.S., Chemistry, Shandong University.

2016 - 2019, Minor, Financial Mathematics & Engineering, Shandong University.

Research Experience

Piecuch Group, Michigan State University, 2021 – Present. Advisor: Professor Piotr Piecuch. Ongoing. Now I'm investigating literature discussing Quantum Monte Carlo (QMC) methods and strongly correlated systems.

Ma Group, Shandong University, 2018 – 2019. Advisor: Professor Yuchen Ma.

I studied some band structures and surface states for some perovskites, in order to get more insights about spin-orbit coupling.

Bu Group, Shandong University, 2017 – 2018. Advisor: Professor Yuxiang Bu.

I and my friends tried to construct a pair of biradical molecules with the potential to act as a magnetic molecular switch on the framework of lactam-lactim tautomerization. We conducted

some mechanistic study about how the magnetic characteristic, mainly showed by coupling constant J , changed drastically from some different perspectives.

Professional Experience

Michigan State University

2021 Fall, 2022 Summer. Teaching Assistant for CEM 161, a freshmen level experimental class in general chemistry.

2022 Spring. Teaching Assistant for CEM 141, General Chemistry.

Publications

1. Chen, D.; Deng, T.; Yang, L.; Bu, Y. Rational Design of Organic Magnets with Switchable Two-Way Couplers: Magnetic Modulation or Switching through Lactam–Lactim Tautomerization. *J. Phys. Chem. C* **2019**, *123*, 14152-14163.