

Yitong Zheng

Add: 420 Temple St., Yale University, CT, 06511, New Haven, US.
Phone: 475-837-0225 Email: zheng.yitong.physics@gmail.com

EDUCATION

Yale University

New Haven, United States

Mechanical Engineering and Material Science Ph.D. Program

08/2021-Present

- Research Supervisor: Prof. Corey O'Hern
- *Physical and Engineering Biology* (PEB) Program

Wuhan University, School of Physics and Technology

Wuhan, China

Bachelor of Science

09/2017-06/2021

- Major: **Physics** (enrolled in **Hongyi Honor Program** in 09/2018)
- Cumulative GPA: **3.97/4.0**; Rank: 1/34

Duke University

Durham, United States

Visiting International Students Program

08/2019-12/2019

- Cumulative GPA: **4.0/4.0**

RESEARCH EXPERIENCE

Invasion of tumor cells into adipocyte tissue

New Haven, United States

Ph.D. Student in Professor Corey O'Hern's Lab at Yale University

08/2021-Present

- Developing 2D and 3D deformable particle model
- Conducting simulations of tumor cell invasion into adipocyte tissue with deformable particle model

Potential of Mean Force Between Like-charged Flexible Polyelectrolytes

Wuhan, China

Research Assistant in Professor Zhi-Jie Tan's Lab at Wuhan University

06/2019-06/2021

- Conducted Monte Carlo simulations of fixed and rotational rigid polyelectrolytes in salt solution using C language
- Analyzed simulation results
- Wrote the manuscript as first author, accepted by *Scientific Reports*

Motion of Nanorods in An Unentangled Melt by MD Simulation

Durham, United States

Research Assistant in Professor Michael Rubinstein's Lab at Duke University

08/2019-12/2019

- Executed molecular dynamics simulations of nanorods diffusion in unentangled polymer melts with LAMMPS
- Analyzed simulation results

PUBLICATION

[1] Zheng, Yitong; Lin, Cheng; Zhang, Jin-Si; Tan, Zhi-Jie. *Ion-mediated interactions between like-charged polyelectrolytes with bending flexibility*. Sci. Rep. (2020). <https://www.nature.com/articles/s41598-020-78684-6>

[2] Wang, Jiuling; O'Connor, Thomas; Grest, Gary; Zheng, Yitong; Rubinstein, Michael; Ge, Ting. *Diffusion of Thin Nanorods in Polymer Melts*. Macromolecules (2021). <https://pubs.acs.org/doi/10.1021/acs.macromol.1c00989>

LEADERSHIP AND WORKING EXPERIENCE

Yale Housing Office, Yale University

New Haven, United States

Community Fellow

08/2022-Present

- Organizing monthly social events for residents

Mentorship Program, Wuhan University

Wuhan, China

Co-Founder, Mentor

03/2021-Present

- Mentoring college students about their career in academia and application to graduate school

Men's Soccer Team, School of Physics and Technology, Wuhan University

Wuhan, China

Key Member

09/2017-06/2021

- Obtained the Second Place in the 2018 Wuhan University Men's Soccer League
- Obtained the Second Place in the 2020 Wuhan University Men's Soccer League

TECHNICAL SKILLS AND INTERESTS

- Programming and Software: C++, Matlab, Python, LAMMPS
- Hobbies: Soccer (13 years, captain of senior high school soccer team), Go (level: one duan)