

DYLAN SUVLU

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Education

Ph.D. Chemistry	2014 – 2020
University of Maine	Orono, ME
• Advisor: Prof. Jayendran C. Rasaiah	
• Thesis: Investigations on the helix-coil transition inside nanotubes	
B.S. Chemistry	2010
University of Maine	Orono, ME

Experience

Postdoctoral Fellow	Sep 2022 – present
Massachusetts Institute of Technology	Cambridge, MA
Postdoctoral Associate	Sep 2020 – Aug 2022
Massachusetts Institute of Technology	Cambridge, MA
Graduate Student Researcher	Sep 2014 – Aug 2020
University of Maine	Orono, ME

Honors and Awards

NSF Postdoctoral Research Fellowship in Biology	Sep 2023 – present
“Statistical physics as a lens to illuminate the evolution of the genetic code and aging”	\$138,000
Burroughs Wellcome Fund Postdoctoral Enrichment Program	Sep 2021 – present
“Plasmon enhanced quantum sequencing of DNA”	\$60,000
Sequoyah Fellow	2016
Anonymous sponsorship for lifetime membership to AISES.	\$1,000
AISES Lighting the Pathway to Faculty Careers in STEM	2015
Mentorship by faculty and financial support for conference travel.	\$2,250

Publications

*Co-first author

6. A. Limaye*, **D. Suvlu***, and A. Willard, “Water molecules mute the dependence of the double-layer potential profile on ionic strength”, *Faraday Discuss.*, 2023, doi: 10.1039/D3FD00114H.
5. H. Nguyen *et al.*, “Bottlebrush Polymers with Discrete Sidechains Display Stereochemistry- and Conformation-Dependent Biological Properties.”, *Nat. Chem.*, no., pp. 85–93, 2022, doi: 10.1038/s41557-021-00826-8.
4. **D. Suvlu**, D. Thirumalai, and J. C. Rasaiah, “Water-mediated interactions determine helix formation of peptides in open nanotubes”, *J. Phys. Chem. B*, no. 3, pp. 817–824, 2021, doi: 10.1021/acs.jpcc.0c10178.
3. **D. Suvlu***, M. Farshad*, and J. C. Rasaiah, “Nanocluster Growth and Coalescence Modulated by Ligands”, *J. Phys. Chem. C*, no. 31, pp. 17340–17346, 2020, doi: 10.1021/acs.jpcc.0c04459.
2. M. Farshad*, **D. Suvlu***, and J. C. Rasaiah, “Ligand-Mediated Nanocluster Formation with Classical and Autocatalytic Growth”, *J. Phys. Chem. C*, no. 49, pp. 29954–29963, 2019, doi: 10.1021/acs.jpcc.9b07683.
1. **D. Suvlu**, S. Samaratunga, D. Thirumalai, and J. C. Rasaiah, “Thermodynamics of Helix–Coil Transitions of Polyalanine in Open Carbon Nanotubes”, *J. Phys. Chem. Lett.*, no. 2, pp. 494–499, 2017, doi: 10.1021/acs.jpcclett.6b02620.

Mentoring

Mentorship Spotlight Award

2022

Recognized by the MIT Department of Chemistry for commitment to mentorship.

Cambridge, MA

Teaching

Co-facilitator

Sep 2022 – May 2023

Massachusetts Institute of Technology

Cambridge, MA

- Selected as 1 of ~10 postdocs to co-facilitate the MIT Leadership and Professional Strategies and Skills Training (LEAPS) course taught by Prof. Anna Frebel and Dr. Angeliki Diane Rigos. Successful co-facilitators are able to teach this class at their institution once they become faculty.

Teaching Assistant

2014 – 2020

University of Maine

Orono, ME

- Teaching assistant for General Chemistry Laboratory (CHY 123, 124, 133). Implemented and contributed to innovative inquiry-based laboratory teaching strategies led by Prof. Mitchell Bruce.
- Teaching assistant for Physical Chemistry I (CHY 471). Graded problem sets, and occasionally delivered lectures.

Presentations

1. “Electrostatic potential fluctuations and electron transfer kinetics of gold nanoparticles in aqueous solution” APS March Meeting in Las Vegas, NV, 2023
2. “Simulations of Hydrogen Nanobubbles on Gold Nanoparticles” MURI Molecular Electrochemistry Biweekly Meeting, 2022
3. “Molecular Simulations of the Double Layer Around Gold Nanoparticles” MURI Molecular Electrochemistry Biweekly Meeting, 2021
4. “Water mediated effects in helix formation inside nanotubes” APS March Meeting in Boston, MA, 2019
5. “Entropy effects and solvent-mediated interaction in helix-coil transitions in nanotubes” Gordon Research Seminar on Chemistry and Physics of Liquids in Holderness, NH, 2017
6. “Thermodynamics of helix-coil transitions of polyaniline in open carbon nanotubes” APS March Meeting in New Orleans, LA, 2017
7. “Hydration and hydrophobic effects on helix formation of polypeptide chains in open carbon nanotubes” ACS National Meeting in San Francisco, CA, 2014

Outreach

I collaborate with Professor Ginger Schultz (UMich) and Dr. Jeff Spencer to develop place-based and culturally relevant curricula for 6th grade students in Utqiagvik, Alaska.