# Dylan Suvlu

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## **EDUCATION**

2014-2020 Ph. D. in Physical Chemistry, University of Maine, Orono, ME

• Advisor: Professor Jayendran C. Rasaiah

2010 B. S. in Chemistry, University of Maine, Orono, ME

American Chemical Society Certified

#### RESEARCH EXPERIENCE

2020- Postdoctoral Associate, Mentor: Dr. Adam P. Willard
Department of Chemistry
Massachusetts Institute of Technology, Cambridge, MA

2014-2020 **Graduate Student Researcher**, Advisor: Professor Jayendran C. Rasaiah Department of Chemistry

University of Maine, Orono, ME

2009 Fellowship NSF funded Research Experience for Undergraduates (REU)

Supercomputing in Maine (SuperMe).

Department of Electrical and Computer Engineering

University of Maine, Orono, ME

#### AWARDS

2015 **Scholarship** "Lighting the Pathway to Faculty Careers in STEM" Sponsored by NSF and administered by the American Indian Science and Engineering Society (AISES). Two years of support totaling \$2,250 and a travel budget to national conferences.

## **PUBLICATIONS**

- 5 Suvlu, D; Thirumalai, D.; Rasaiah, J. C. Kinetics of Helix Formation in Polypeptides Confined to Nanotubes. *In preparation*
- 4 Suvlu, D.; Thirumalai, D.; Rasaiah, J. C. Water-Mediated Interactions Determine Helix Formation of Peptides in Open Nanotubes. bioRxiv 2020, 2020.11.11.378026. <a href="https://doi.org/10/ghmzv9">https://doi.org/10/ghmzv9</a> Accepted
- 3 Suvlu, D.; Farshad, M.; Rasaiah, J. C. Nanocluster Growth and Coalescence Modulated by Ligands. J. Phys. Chem. C 2020, 124 (31), 17340–17346. https://doi.org/10/gg6rmq
- Farshad, M.; Suvlu, D.; Rasaiah, J. C. Ligand-Mediated Nanocluster Formation with Classical and Autocatalytic Growth. *J. Phys. Chem. C* **2019**, 123 (49), 29954–29963. <a href="https://doi.org/10/ggj9nx">https://doi.org/10/ggj9nx</a>
- Suvlu, D.; Samaratunga, S.; Thirumalai, D.; Rasaiah, J. C. Thermodynamics of Helix-Coil Transitions of Polyalanine in Open Carbon Nanotubes. *J. Phys. Chem. Lett.* **2017**, 8 (2), 494–499. <a href="https://doi.org/10/f9ktgm">https://doi.org/10/f9ktgm</a>

#### **PRESENTATIONS**

#### Oral Presentations

- 2019 "Water mediated effects in helix formation inside nanotubes" APS March Meeting in Boston, MA
- 2017 "Entropy effects and solvent-mediated interactions in helix-coil transition in nanotubes" Gordon Research Seminar on Chemistry and Physics of Liquids in Holderness, NH
- 2017 "Thermodynamics of helix-coil transitions of polyalanine in open carbon nanotubes" APS March Meeting in New Orleans, LA
- 2014 "Hydration and hydrophobic effects on helix formation of polypeptide chains in open carbon nanotubes" ACS National Meeting in San Francisco, CA

## **Poster Presentations**

- 2019 "Water mediated interactions contribute to the sequence dependence of helix formation in nanotubes" MolSSI Workshop on Machine Learning in Chemistry at University of Maryland, College Park
- 2019 "Ligand-mediated nanocluster nucleation, growth, and coalescence" Gordon Research Conference on Chemistry and Physics of Liquids in Holderness, NH
- 2018 "Kinetics of ligand mediated ultra-small silver cluster formation" Gordon Research Conference on Noble Metal Nanoparticles in Mount Holyoke, MA
- 2018 "Water mediated effects in helix formation in nanotubes" Gordon Research Conference on Water and Aqueous Solutions in Holderness, NH
- 2017 "Entropy effects and solvent-mediated interactions in helix-coil transition in nanotubes" Gordon Research Seminar on Chemistry and Physics of Liquids in Holderness, NH
- 2016 "Confinement and hydration effects on helix formation of polyalanine in open nanotubes" American Indian Science and Engineering Society National Conference in Minneapolis, MN
- 2015 "Confinement and hydration effects on helix formation of alanine polymers in carbon nanotubes immersed in a water bath" American Indian Science and Engineering Society National Conference in Phoenix, AZ

### **TEACHING**

2015-2019 Teaching Assistant for General Chemistry Laboratory (CHY 123, 124, 133) University of Maine, Orono, ME

# SKILLS

Proficiency in Linux, Fortran, Python, Julia, MATLAB, Gromacs, NAMD, OpenMM, Gaussian

# REFERENCES

Dr. Jayendran C. Rasaiah Professor of Chemistry, University of Maine

rasaiah@maine.edu Office: 207.581.1179

Dr. Samuel T. Hess

Professor of Physics, University of Maine samuel.hess@maine.edu Office: 207.581.1036

Dr. Dave Thirumalai

Professor of Chemistry, The University of Texas at Austin

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