SARAH ALLEC

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EDUCATION

University of California Riverside

Ph.D. in Materials Science & Engineering, 3.96 GPA
Concentration: Computational Materials Science & Engineering — Exp. 2020
Advisor: Dr. P. Alex Greaney

M.S. in Materials Science & Engineering, 3.96 GPA — 2018
Concentration: Computational Materials Science & Engineering
Advisor: Dr. Bryan M. Wong

B.S. in Mathematics (Applied), 3.97 GPA, *Summa cum laude* — 2015
Concentration: Physics

PUBLICATIONS

Sarah I. Allec, Niranjan V. Ilawe, and Bryan M. Wong, "Unusual Bandgap Oscillations in Template-Directed π-Conjugated Porphyrin Nanotubes." *Journal of Physical Chemistry Letters*, **7**, 2362 (2016).

Sarah I. Allec and Bryan M. Wong, "Inconsistencies in the Electronic Properties of Phosphorene Nanotubes: New Insights from Large-Scale DFT Calculations." *Journal of Physical Chemistry Letters,* **7**, 4340 (2016).

Yue Cao, Timothy G. Morrissey, Eric Acome, Sarah I. Allec, Bryan M. Wong, Christoph Keplinger, and Chao Wang, "A Transparent, Self-Healing, Highly Stretchable Ionic Conductor." *Advanced Materials*, **29**, 1605099 (2017).

Yue Cao, Haiping Wu, Sarah I. Allec, Bryan M. Wong, Dai-Scott Nguyen, and Chao Wang, "A Highly Stretchy, Transparent Elastomer with the Capability to Automatically Self-Heal Underwater." *Advanced Materials*, **30**, 1804602 (2018).

Sarah I. Allec, Anshuman Kumar, and Bryan M. Wong, "Linear-Response and Real-Time, Time-Dependent DFT for Predicting Optoelectronic Properties of Dye-Sensitized Solar Cells." *Dye Sensitized Solar Cell Mathematical Modelling, Optimization and Design*, 171 (2019).

Sarah I. Allec, Yijing Sun, Jianan Sun, Chia-en A. Chang, and Bryan M. Wong, "Heterogeneous CPU+GPU-Enabled Simulations for DFTB Molecular Dynamics of Large Chemical and Biological Systems." *Journal of Chemical Theory and Computation*, **15**, 2807 (2019).

AWARDS

NSF Graduate Research Fellowship, UC Riverside 2017
NASA MIRO FIELDS Graduate Student Fellowship, UC Riverside 2016
Best Poster Presentation, UC Riverside Undergraduate Research Symposium 2015
Undergraduate Research Mini-grant, UC Riverside 2015
Dean's Academic Distinction Award, UC Riverside 2012 – 2015
Regent's Scholarship, UC Riverside 2011

PROFESSIONAL SOCIETY MEMBERSHIPS

American Chemical Society
American Physical Society
American Association for the Advancement of Science

LEADERSHIP EXPERIENCE

AWIS UCR Co-President 2019-Present
Set goals, vision, and direction for AWIS UCR

AWIS UCR Treasurer 2018-2019
Managed organization's finances through budgeting and allocation of funds

School on Wheels Tutor 2018-Present
Serve as a positive role model to provide consistency and educational assistance to homeless students in Riverside

FIRST LEGO League Coach 2015-2016
Mentored a group of 7 middle school students in robot design and programming

Supplemental Instruction Mentor, UC Riverside Academic Resource Center 2014-2015
Mentored a group of 7 Supplemental Instruction Leaders and organized new employee training

Supplemental Instruction Leader, UC Riverside Academic Resource Center 2013-2015
Facilitated weekly study sessions for historically difficult courses