

Ashley J. Bird

Local Address

5107 Leralynn Street, Apt. 102
Austin, TX 78751

a.bird@utexas.edu | (713)702-0256

Permanent Address

16903 Clan Macintosh Drive
Houston, TX 77084

EDUCATION

Bachelor of Science, Chemical Engineering Honors, May 2018

Elements of Computing Certificate
The University of Texas at Austin
GPA: 4.00

Study Abroad, Summer 2015

Universitat Autònoma de Barcelona (Barcelona, Spain)

RESEARCH EXPERIENCE

Undergraduate Research Assistant

8/16 – present

Milliron Research Group, University of Texas at Austin

- Functionalize Sn-doped In_2O_3 plasmonic nanocrystals with ligands to gain desired properties
- Develop thermochromic composite gels based on plasmonic nanocrystals and ligand exchange complexes
- Analyze composite material structure and optical properties using FTIR, Raman Spectroscopy and NMR

Research Assistant

5/16 – 7/16

Center for Strategic Approaches to the Generation of Electricity, University of South Carolina

- Synthesize supported nanoparticle and nanorod catalysts for carbon dioxide hydrogenation
- Analyze structure and morphology of catalysts before and after reaction to determine stability using STEM, BET, ICP, XRD and Raman Spectroscopy
- Present research results at symposium

Undergraduate Research Assistant

11/14 – 12/15

Cellular and Metabolic Engineering Laboratory, University of Texas at Austin

- Produced desired chemicals utilizing fungal genetic engineering through homologous recombination
- Practiced molecular cloning techniques
- Performed lipid quantification and extraction

RELATED EXPERIENCE

Vice President of Operations

5/16 - present

Society of Asian Scientists and Engineers (SASE)

- Organize fundraisers to increase funds for professional and social activities
- Manage budget and membership information using MS Excel functions (e.g. data validation, pivot tables)
- Design rewards program to retain and increase active membership

SKILLS

Proficient in Microsoft Word, PowerPoint, and Excel

Familiar with Python and MATLAB

HONORS & AWARDS

Distinguished College Scholar, 2016

Virginia & Ernest Cockrell, Jr. Scholarship in Engineering, 2014-Present

Mu Alpha Theta National Mathematics Honor Society Scholarship, 2014

ASSOCIATIONS

Officer, Society of Asian Scientists and Engineers (SASE), 2014-Present

Virtual Outreach Team Member, Society of Women Engineers (SWE), 2014-Present

Member, Tau Beta Pi Interdisciplinary Engineering Honor Society (TBP), 2016-Present

Member, Omega Chi Epsilon Chemical Engineering Honor Society (OXE), 2016-Present

Member, American Institute of Chemical Engineers (AIChE), 2014-Present

Member, Engineers for a Sustainable World (ESW), 2014-Present

Participant, LeaderShape Institute, January 2015