Conner Pope

Email: cpope11@utk.edu

Education

University of Tennessee – January 2020 to Current
- Doctor of Philosophy in Biosystems Engineering
- Master of Science in Biosystems Engineering (*summa cum laude*, GPA: 3.95)

Auburn University – August 2015 to May 2019
- Bachelor of Biosystems Engineering (*cum laude*, GPA: 3.5)

Work Experience

Graduate Research Assistant | University of Tennessee – January 2020 to Current
- Hydrogenated CO_2 over Fe, Co, and FeCo/γ-Al_2O_3 to make synthetic paraffinic kerosenes for sustainable aviation fuel production
- Solvothermally synthesized Mg-MOF-74/activated biochar composites to develop novel porous solids for CO_2 adsorption

Temporary Research Assistant | University of Tennessee – August 2019 to January 2020
- Separated hemp and switchgrass extractives with ethanol and developed predictive models for hemp and pine/switchgrass pellet characteristics using NIR spectroscopy

Undergraduate Research Assistant | Auburn University – March 2018 to May 2019
- Hydroprocessed *Brassica carinata* oil over Ru, Pd, and Ni/C to create biocrudes for sustainable aviation fuel production

Publications

- Pope, C., G. Goenaga Jimenez, T.A. Zawodzinski Jr., T. Rahman, S. Adhikari, D.J. Carrier, N. Labbé and N. Abdoulmoumine. 2023. Biochar activation for CO_2 adsorption: Effects of activation temperature, activation time, and potassium hydroxide:biochar mass ratio. *Biochar*. *Under Review*.
- Tumuluru, J.S., K. Rajan, C. Hamilton, C. Pope, T.G. Rials, J. McCord, N. Labbé and N.O. André. 2022. Pilot-scale pelleting tests on high-moisture pine, switchgrass, and their blends: Impact on pellet physical properties, chemical composition, and heating values. *Frontiers in Energy Research*, 9, 788284. https://doi.org/10.3389/fenrg.2021.788284
- Jahromi, H., S. Adhikari, P. Roy, E. Hassani, C. Pope, T.-S. Oh and Y. Karki. 2021. Production of green transportation fuels from *Brassica carinata* oil: A comparative study of noble and transition metal catalysts. *Fuel Processing Technology*, 215, 106737. https://doi.org/10.1016/j.fuproc.2021.106737
- Liu, Q., E. Ehite, R. Houston, Y. Li, C. Pope, N. Labbé and N. Abdoulmoumine. 2021. Synthesis and evaluation of layered double hydroxide based sorbent for hot gas cleanup of hydrogen chloride. *Materials Science for Energy Technologies*, 4, 46-53. https://doi.org/10.1016/j.mset.2020.12.003

Conference Abstracts and Presentations

- Pope, C. Synthesis of metal-organic framework/activated biochar composites for carbon capture. AIChE 2023 Spring Meeting and 19th Global Congress on Process Safety, Oral Session, March 12th-16th 2023, Houston, TX, USA
- Pope, C., T. Rahman, G. Goenaga Jimenez, S. Adhikari, T.A. Zawodzinski Jr., N. Labbé and N. Abdoulmoumine. Improving biochar surface area for CO_2 adsorption through potassium hydroxide chemical activation. AIChE 2023 Spring Meeting and 19th Global Congress on Process Safety, Poster Session, March 12th-16th 2023, Houston, TX, USA
- Pope, C., N. Labbé and N. Abdoulmoumine. Investigating the effect of crystallite size on MOF/AB composite synthesis for CO_2 adsorption. 2022 Frontiers in Biorefining 6th International Conference, Poster Session, October 24th – 27th 2022, St. Simons Island, GA, USA
- Pope, C. and S. Adhikari. Influence of noble metal catalysts on the hydroprocessing of hexane-extracted *Brassica carinata* bio-oil. Thermal & Catalytic Sciences 2018 Symposium, Poster Session, October 8th – 10th 2018, Auburn, AL, USA