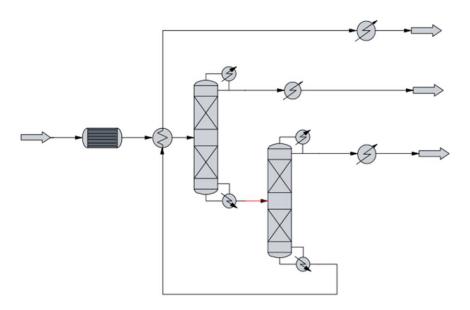
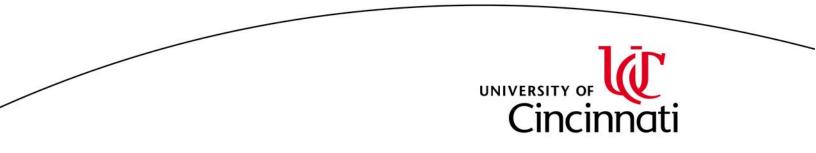
2018 UC Chemical Engineering Senior Design Exposition

April 12, 2018, 5:00 – 7:00 pm Fourth Floor, Engineering Research Center



Sponsored by:

Department of Chemical and Environmental Engineering American Institute of Chemical Engineers Ohio Valley Section



2018 POSTERS

Biodiesel and Glycerin

PROJECT 5046-1801: Microalgae Production Facility, Hayden Dillon, Brad Kleier, Anthony Miragliotta, and Ethan Slaboden

PROJECT 5046-1802: Production of Biodiesel and Bioethanol from Microalgae, Amber Bahrani, Lauryn Burdette, Carissa Cumby, and Amy Sears

PROJECT 5046-1803: Production of Biodiesel Using Dimethyl Carbonate, Matthew Keller, Benjamin Lieberman, Daniel Meyer, and Colin McConnell

PROJECT 5046-1804: Glycerol Conversion To 1,3-Propanediol, Lexis Helminski, Chelsea Livesay, and Tyler Stump

PROJECT 5046-1805: Sodium Malate Production, MacKenzie Bower, Korey Kellogg, Jacquelyn Miller, and Eric Wait

PROJECT 5046-1806: Aqueous Phase Reforming of Crude Glycerol, Phyu Cin Myint, Janki Patel, Amanda Sherman, and Amber Volmer

Renewably Sourced Processes

PROJECT 5046-1807: Production of Aromatic Hydrocarbons from Vegetable Oil, Peter Wendt, Javan Yarborough, and Samantha Doherty

PROJECT 5046-1808: Syngas Derived Ethanol From Wood Feedstock, Austin Lammers, Derek Rowe, and Derek Wetzel

PROJECT 5046-1809: The Conversion Of Wood Waste To Ethanol And Further Refining To Hydrogen, Roland Zeman, Elise Bruns, Todd Brannon, and Hannah Schultz

PROJECT 5046-1810: Conversion of Sugarcane Bagasse to Ethanol, Fiona Shaw, Connor Ernst, Garrett Slagle, and Ian Diersing

PROJECT 5046-1811: Production of Simple Sugars from Sugarcane Bagasse, Allison Snyder, Jessica Less, Lance Crockett, and Max Balli

PROJECT 5046-1812: Synthesis of Butadiene from Biomaterials, Jagatdeep Chadha, Theo Brooks, Brandon Bachelier, and Nick Wisman

Energy and Environmental

PROJECT 5046-1814: Producing Marketable Products from Fracking Produced Water, Mary Conroy, Taylor Hembree, Miranda Hileman, and Emily Strayer

PROJECT 5046-1815: Retrofitting Cooling Towers to Capture CO₂, Matthew Feldkamp, Zachary Sterzenbach, Anthony Tong, and Lance Weber

PROJECT 5046-1816: Load Leveling Water Electrolysis Plant, Kyle Craig, Shawn Downing, Mitchell Grafton, and Steven Roland

PROJECT 5046-1817: Direct Synthesis of Dimethyl Carbonate, William Barrett, Dorien Clark, and Tyler Graffice

PROJECT 5046-1819: Recycling Lithium-Ion Batteries, Jonathan Matthews, Chris Kramb, Tim Koch, and Nolan Parker

PROJECT 5046-1820: Sulfur Combustion Regenerative Power Plant, Isaac Brewster, Kassi Crawford, Marcus Moore, and Brett Schoenling

<u>Food</u>

PROJECT 5046-1821: Commercial Hydroponic Farming, Madison Pack, Samuel Kratt, Nathan Fullenkamp, and Samuel Locke

PROJECT 5046-1822: Commercial Indoor Aquaponic Tomato Farm, Nickolas Ross, Maxwell Railing, and Ryan Noga

Chemicals from Coal and Natural Gas

PROJECT 5046-1823: Production of Oxygenates from Syngas, Shawn Giffin, Tyler Karkut, Collin McCord, and Ryan Vu Nguyen

PROJECT 5046-1824: Production of Ethylene and Acetic Acid from Natural Gas Liquids, Nick Flessner, James Rhynard, Jacob Bollman, and Daniel Thibodeau