



CHEMICAL AND BIOLOGICAL ENGINEERING DEPARTMENT SEMINAR SERIES

Creating our Biobased Future

Presented by: Seth Snyder, Energy Systems Division, Argonne National Laboratory

Time: Wednesday, October 14; 3:15 – 4:30 pm

Location: Perlstein Hall Auditorium

Abstract

There is a growing consensus for renewable, sustainable growth in a carbon constrained world. Biomass feedstocks and bioprocessing are playing a major role in this societal transition. We develop technology platforms that integrate bioconversions with membrane-based separations to produce biobased chemicals, biofuels, and other energy and co-products. In this presentation will highlight strategies for direct production of organic acids, carbon dioxide capture from flue gas, "renewable" methane production, as well as novel biofuel production technologies. Pathways (and pitfalls) to commercialization will be discussed. We will review the implications on sustainability, including land use, water use, petroleum displacement, and greenhouse gas emissions.