

ChemCatBio Webinar Series

“Technology Options for Catalytically Upgrading Biochemically Derived 2,3-Butanediol from Lignocellulosic Biomass Feedstocks to Advanced Biofuels and Chemical Coproducts”



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Registration: <https://attendee.gotowebinar.com/register/4933717979254209035>

Recent advances in the fermentative production of 2,3-butanediol (BDO) from mixed sugars generated via pretreatment and enzymatic saccharification of lignocellulosic biomass has positioned BDO as an attractive biochemically derived intermediate for advanced biofuels and chemicals production. Within ChemCatBio’s Catalytic Upgrading of Biochemical Intermediates project, research teams from multiple national labs have been collaborating on the development of catalytic upgrading routes for this key intermediate. These routes include direct single-step and sequential upgrading pathways to mixed olefins as fuel precursors and to butadiene as a chemical product precursor. While initial efforts within this collaboration were focused on development of catalyst formulations and reaction technologies for improved conversion and selectivity to the targeted compounds, the impact of water content and catalyst inhibitors (e.g., ash-derived inorganic compounds, organic degradation products, neutralization salts, and fermentative coproducts) in integrated process streams is a current emphasis of the project. In this presentation, recent progress in collaborative efforts to develop economically viable BDO catalytic upgrading technology options in a robust manner using commercially relevant process streams will be discussed by multiple national laboratory investigators.

For more information, please visit our website at ChemCatBio.org or email us directly at Contact@ChemCatBio.org. ChemCatBio is funded by the U.S. Department of Energy (DOE) Office of Energy Efficiency and Renewable Energy (EERE) Bioenergy Technologies Office.