

# Catalytic Fast Pyrolysis



## Goal:

Develop catalytic fast pyrolysis (CFP) technologies that are capable of producing both cost-competitive biofuels at yields greater than 75 GGE/dry ton of biomass and high-value co-products, and can be market-responsive by controlling the product distribution to meet market demand

## Approach:

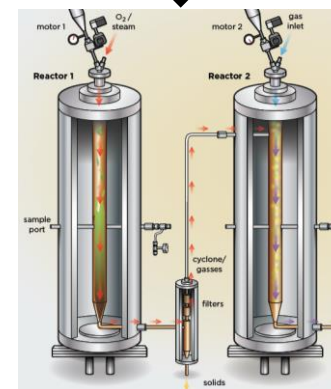
- Catalyst design informed by coupled experimental and computational efforts
- Multi-scale catalyst evaluation with both model compounds and biomass pyrolysis vapors to elucidate underlying CFP chemistry and provide data for techno-economic analysis
- Development of strategies for mitigating catalyst deactivation and enhancing fuel quality

## Impact:

Reduce biomass conversion costs and enable commercialization of CFP technologies by providing foundational catalyst and process knowledge



*Biomass*



*Catalytic  
Fast  
Pyrolysis*



*Fuels &  
Chemicals*