

Day 2 Report—Breakout Group: Fuels via Thermochemical Conversion, Group A

Top Advancement Activities Recommended by Group:

1. **Integrated pilot scale testing for catalyst performance measurement**
 - Integrated pilot-scale testing for catalyst performance is paramount for collecting reliable engineering data that validates technical and economical models, guiding future engineering design for scale-up and demonstration. The designed outcomes is identification of technically feasible and economically viable processes for scale-up to demonstration.
2. **Pathway user facility**
 - Better identify and support facilities capable of pilot scale T.C. testing and development. DOE could coordinate research activities for pilot plants. Demonstration scale user facilities should be established (by region or biomass type).
3. **Support for scaling catalyst production and piloting**
 - Facilitate connection between catalyst manufacturers, process inventors and developers in DOE funded programs. The desired outcome is to scale up new catalyst manufacturing and have them tested at pilot scale for yield and lifetime.
4. **Knowledge database of thermochemical technologies**
 - Develop a knowledge database of thermochemical technologies incorporating different feedstock, processes, and products for information sharing. This database will consolidate field (pilot or large scale) and patent data from DOE funded projects and open literature. The desired outcome is to accelerate the discovery of compatible partners and technologies.

Key Reflections By Group Day 1 and 2:

- Biomass feeding is a difficult issue to universally address because it is process specific.
- Encouraging stakeholders to share data
- Significant number of catalyst issues remain
- Knowledge database is a potential “game-changer” for entire industry