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Catalytic deoxygenation of model compounds from flash pyrolysis of lignocellulosic biomass over activated charcoal-based catalysts

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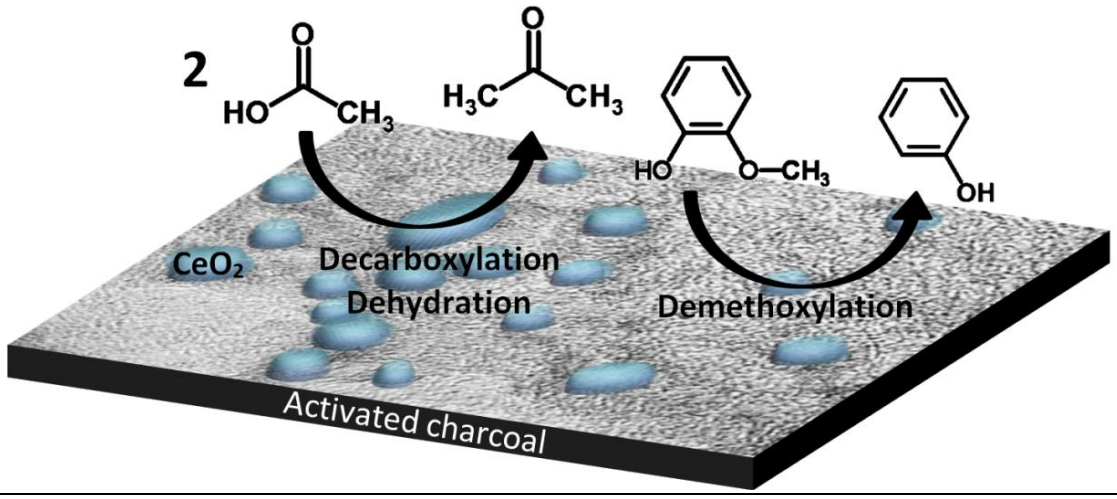
GRAPHICAL ABSTRACT



Highlights

- Ketonic decarboxylation is highly desirable to reduce bio-oil acidity and O/C ratio
- CeO_2/C is efficient to fully convert acetic acid through ketonic decarboxylation
- Fe_2O_3/C is selective to convert guaiacol into phenol by demethoxylation