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

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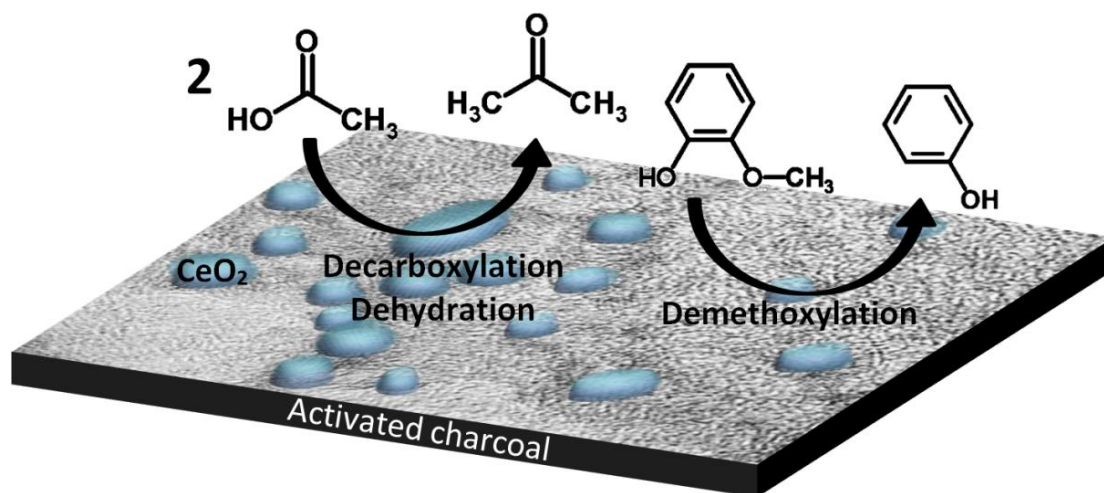
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## GRAPHICAL ABSTRACT



## Highlights

- Ketonic decarboxylation is highly desirable to reduce bio-oil acidity and O/C ratio
- $\text{CeO}_2/\text{C}$  is efficient to fully convert acetic acid through ketonic decarboxylation
- $\text{Fe}_2\text{O}_3/\text{C}$  is selective to convert guaiacol into phenol by demethoxylation

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