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# Ketonization of Levulinic Acid and $\gamma$ -Valerolactone to Hydrocarbon Fuel

## Precursors

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## Ketonization of Levulinic Acid and $\gamma$ -Valerolactone to Hydrocarbon Fuel Precursors

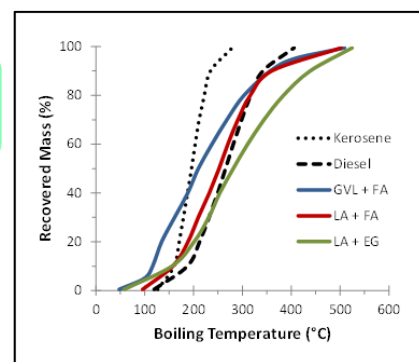
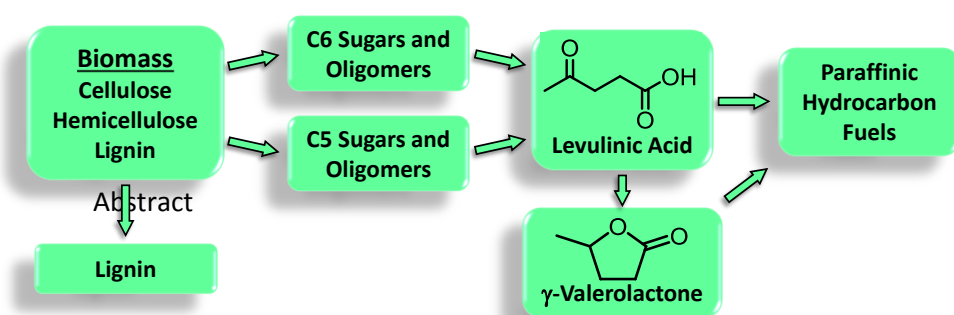
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Highlights:

- Levulinic acid or  $\gamma$ -valerolactone are ketonized in a continuous process
- Deoxygenated and oligomerized fuel precursors are produced
- Products are consistent with ketonization of GVL ring-opened intermediates
- Products consist of mostly open-chain alkanes and olefins, ketones, and aromatics
- Catalysts are easily regenerated to their original activity

Graphical

abstract



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