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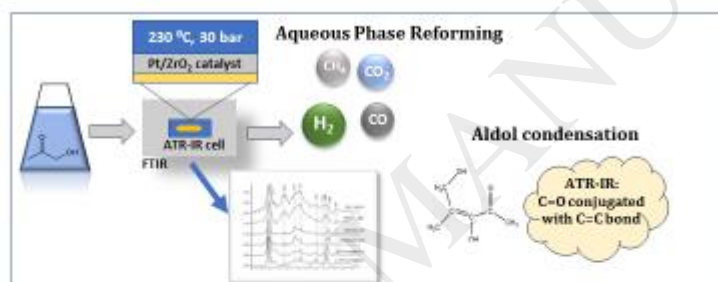
***In situ* ATR-IR studies in aqueous phase reforming of hydroxyacetone on Pt/ZrO₂ and Pt/AlO(OH) catalysts: the role of aldol condensation**

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graphical abstract



Highlights

- *In situ* ATR-IR spectroscopy was used to study Aqueous Phase Reforming at 230°C/30 bar
- Formation of strongly adsorbed aldol condensation products was observed on Pt/ZrO₂ and ZrO₂
- Adsorbed CO is not involved in the rate-determining step in APR of hydroxyacetone

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