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# Hydrogenation of sodium hydrogen carbonate in aqueous phase using Metal / activated carbon catalysts

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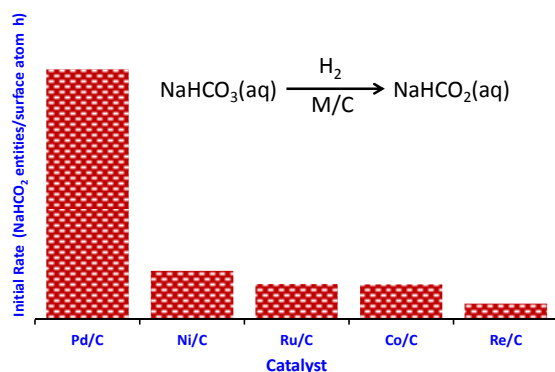
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## Graphical abstract



## Highlights

- The Pd/C and Ru/C were the most active catalysts in hydrogenation of NaHCO<sub>3</sub>
- Only the NaHCO<sub>2</sub> formation was detected on five catalysts studied.
- The lower activity of Re, Ni and Co catalysts was due to the oxidation of metals
- Pd and Ru catalysts activity after four recycles was due to reduced phase's stability

The catalytic hydrogenation of sodium hydrogen carbonate in aqueous phase (NaHCO<sub>3</sub>) to produce sodium formate (or formic acid) on activated carbon-supported

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