

Accepted Manuscript

Title: Atmospheric hydrodeoxygenation of bio-oil oxygenated model compounds: A review

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PII: S0165-2370(17)31011-2
DOI: <https://doi.org/10.1016/j.jaap.2018.04.013>
Reference: JAAP 4312

To appear in: *J. Anal. Appl. Pyrolysis*

Received date: 10-11-2017
Revised date: 17-3-2018
Accepted date: 16-4-2018

Please cite this article as: Hamed Pourzolfaghar, Faisal Abnisa, Wan Mohd Ashri Wan Daud, Mohamed Kheireddine Aroua, Atmospheric hydrodeoxygenation of bio-oil oxygenated model compounds: A review, Journal of Analytical and Applied Pyrolysis <https://doi.org/10.1016/j.jaap.2018.04.013>

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Atmospheric Hydrodeoxygenation of bio-oil oxygenated model compounds; a review

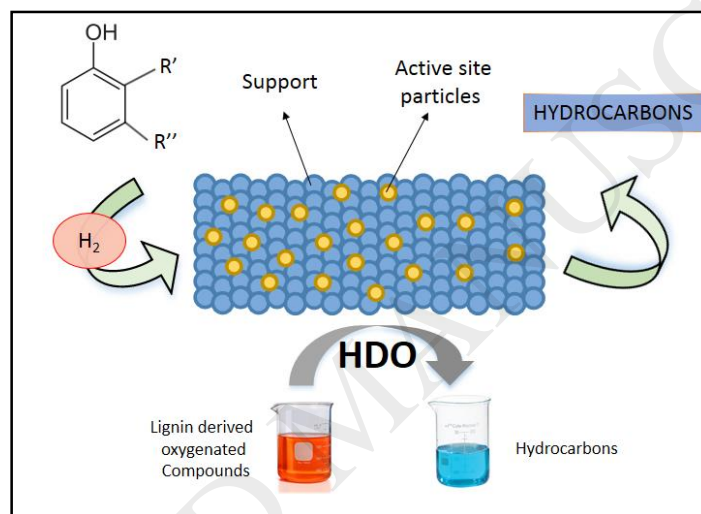
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Graphical abstract



Highlights

- Atmospheric hydrodeoxygenation is an advanced process for bio-oil upgrading purpose.
- MoO₃, Ni₂P/SiO₂, Pd-FeO_x/SiO₂, Fe/SiO₂, and Pt/SiO₂ are the most promising catalysts efficiently upgrade oxygenated compounds in this process.
- Operating temperature, Hydrogen flow ratio, type of the catalyst, and the catalyst stability are the most important factors to be considered when it is intended to reach a high conversion efficiency for the hydrodeoxygenation in low H₂ pressure.

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