

Simultaneous fast pyrolysis and catalytic upgrading of lignin to obtain a marine diesel fuel - DTU Orbit (08/11/2017)

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The topic of this Ph.D. project is to convert lignin, a by-product from a 2nd generation bio-ethanol plant, into a marine diesel fuel by fast pyrolysis followed with catalytic upgrading of the pyrolysis vapor. Lignin, a major component of lignocellulosic biomass, is underutilized in the 2nd generation bio-ethanol plants. Shipping industry on the other hand is looking for clean alternative fuels in order to meet stricter fuel quality and emission standards. To convert lignin into a renewable marine diesel fuel will both accelerate the development of modern bio-refinery and transfer the marine sector into a sustainable future.

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