

**Reactions Responsible for Aging in Wood-Based Pyrolysis Oil:  
Coniferyl Alcohol, Variants and the Role of Protonated Quinone Methides**  
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Our dependence on fossil fuels can be alarming not only because they are a non-renewable source, but also due to the concerns surrounding increasing carbon dioxide levels in the atmosphere. As fossil fuel resources become scarce and continue to damage our atmosphere, developing alternative fuel sources is becoming increasingly important. In the process of developing alternative resources, the conversion of biomass to a fuel is one possibility. Given that the state of Maine has a significant industry related to wood products, wood-wastes, such as sawdust or unusable branches, have the potential to

for seconds in a reactor.<sup>1</sup> While wood

<sup>i</sup> Bridgwater, A. V. *Biomass Bioenergy* **2012**, 38, 68-94.

ii