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Pyrolysis Oil and its Applications

By

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Fuels obtained from biomasses are becoming a valid alternative to the use of fossil fuels, especially in the light of stringent environmental constraints. Fast pyrolysis of lignocellulosic biomass produces a renewable liquid fuel called pyrolysis oil that has a variety of applications as a potential replacement for fossil fuels. One aspect of pyrolysis oil that has been addressed to promote its broader use is improving the stability of pyrolysis oil with respect to viscosity increase over time, making long range transportation and storage possible. Other properties of pyrolysis oil present challenges during its use in standard equipment constructed for petroleum derived fuels. Significant effort has been spent on research and development to improve the stability of pyrolysis oil and for its use in burners and other energy applications.

In this presentation, I will focus on the rapid thermal processing or RTP™ process for fast thermal conversion of wood and/or other biomass to high yields of liquid fuels and the various applications of stabilized RTP green fuel.

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