



## BIOREFINERY

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Near-neutral pre-extraction of hemicelluloses and subsequent kraft pulping of southern mixed hardwoods

*Sung-Hoon Yoon, Mehmet Sefik Tunc, and Adriaan Van Heiningen*

## PROCESS CHEMISTRY

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Identification of acid-insoluble filter-plugging compounds and optimal acid-washing procedures for tubular backpulse pressure filters

*Kevin Taylor, Rich Adderly, and Gavin Baxter*

## BLEACHING

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Cost-effective brightening of thermomechanical pulp from mountain pine beetle-infested lodgepole pine

*Thomas Q. Hu, Carmen Margetts, Krista Morrow, Michelle Zhao, Surjit Johal, and Bernard Yuen*

## CHEMICAL RECOVERY

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Influence of chlorine and potassium on operation and design of chemical recovery equipment

*Marcelo Hamaguchi and Esa K. Vakkilainen*

## RECYCLED FIBER

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Use of a sol-gel processed polyvinyl alcohol/inorganic silica hybrid material to improve the surface strength of recycled fiber sheets

*Yi-Ding Shen, Yan-Na Zhao, and Xiao-Rui Li*