

Selected references

- Key, R. E.; Bozell, J. J., Progress toward lignin valorization via selective catalytic technologies and the tailoring of biosynthetic pathways. *ACS Sus. Chem. Eng.* **2016**, *4*, 5123-5135.
- Njiojob, C.; Bozell, J. J.; Long, B. L.; Elder, T.; Key, R. E.; Hartwig, W. T. Enantioselective syntheses of lignin models - an efficient synthesis of β -O-4 dimers and trimers using the Evans chiral auxiliary. *Chem. Eur. J.* **2016**, *22*, 12506-12517.
- Tao, J.; Hosseinaei, O.; Delbeck, L.; Kim, P.; Harper, D. P.; Bozell, J. J.; Rials, T. G.; Labbé, N. Effects of organosolv fractionation time on thermal and chemical properties of lignins. *RSC Adv.* **2016**, *6*, 79228-79235.
- Njiojob, C.; Rhinehart, J. L.; Bozell, J.; Long, B. L. Synthesis of enantiomerically pure lignin dimer models for catalytic selectivity studies. *J. Org. Chem.* **2015**, *80*, 1771-1780.
- Astner, A. F.; Young, T. M.; Bozell, J. J. Lignin yield maximization of mixed biorefinery feedstocks by organosolv fractionation using Taguchi Robust Product Design. *Biomass Bioenergy* **2015**, *73*, 209-216.
- Jarrell, T. M.; Marcum, C. L.; Sheng, H. M.; Owen, B. C.; O'Lenick, C. J.; Maraun, H.; Bozell, J. J.; Kenttamaa, H. I. Characterization of organosolv switchgrass lignin by using high performance liquid chromatography/ high resolution tandem mass spectrometry using hydroxide-doped negative-ion mode electrospray ionization. *Green Chem.* **2014**, *16*, 2713-2727.
- Bozell, J. J.; Astner, A.; Baker, D.; Biannic, B.; Cedeno, D.; Elder, T.; Hosseinaei, O.; Delbeck, L.; Kim, J. W.; O'Lenick, C. J.; Young, T. Integrating separation and conversion—conversion of biorefinery process streams to biobased chemicals and fuels. *Bioenergy Res.* **2014**, *7*, 856-866.
- Bozell, J. J. Approaches to selective catalytic conversion of lignin: a grand challenge for biorefinery development. *Top. Curr. Chem.* **2014**, *353*, 229-256.
- Biannic, B.; Bozell, J.; Elder, T. Steric effects in the design of Co-Schiff base complexes for the catalytic oxidation of lignin models to para-benzoquinones. *Green Chem.* **2014**, *16*, 3635-3642.
- Elder, T.; Bozell, J. J.; Cedeno, D. The effect of axial ligand on the oxidation of syringyl alcohol by Co(salen) adducts. *Phys. Chem. Chem. Phys.* **2013**, *15*, 7328-7337.
- Biannic, B.; Bozell, J. J. Efficient cobalt-catalyzed oxidative conversion of lignin models to benzoquinones. *Org. Lett.* **2013**, *15*, 2730-2733.
- Cedeno, D.; Bozell, J. J. Catalytic oxidation of para-substituted phenols with cobalt-Schiff base complexes/O₂-selective conversion of syringyl and guaiacyl lignin models to benzoquinones. *Tetrahedron Lett.* **2012**, *53*, 2380-2383.
- Bozell, J. J.; O'Lenick, C. J.; Warwick, S. Biomass fractionation for the biorefinery: heteronuclear multiple quantum coherence-nuclear magnetic resonance investigation of lignin isolated from solvent fractionation of switchgrass. *J. Agric. Food. Chem.* **2011**, *59*, 9232-9242.
- Bozell, J. J.; Black, S. K.; Myers, M.; Cahill, D.; Miller, W. P.; Park, S. Solvent fractionation of renewable woody feedstocks: Organosolv generation of biorefinery process streams for the production of biobased chemicals. *Biomass Bioenergy* **2011**, *35*, 4197-4208.
- Bozell, J. J.; Petersen, G. R. Technology development for the production of biobased products from biorefinery carbohydrates-the US Department of Energy's "Top 10" revisited. *Green Chem.* **2010**, *12*, 539-554.
- Bozell, J. J. Connecting biomass and petroleum processing with a chemical bridge. *Science* **2010**, *329*, 522-523.