

## Distinguished Lecture Series Seminar

September 03, 2008

The McCollum Room: 775A & B Tan Hall

12:30 - 2:00 PM

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“Selective Catalytic Conversion of Lignin ”

### ABSTRACT:

While lignin is currently primarily used as low grade fuel, its composition of phenyl propane units makes it a potential source of phenolic compounds or of high quality fuel components, if primary products can be fully hydrogenated. Despite intense efforts, the yields for the first group of reactions were rather limited.

The lecture will outline the successful strategies to produce phenol monomers and oligomers from lignin, as well as stopping the re-polymerization of the primary products. The main reaction route utilized is hydrolysis, but radical reactions occurring at lower solvent densities will also be discussed. The boundary conditions for full hydrogenation and ring opening reactions of the primary products will be described and discussed to indicate the potential for synthesizing fuel components.

