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Research Interest

Lignin Valorization for Modern Lignocellulosic Biorefinery:

- Lignin-based value-added material: carbon fiber, composite, nanoparticle, capacitor, asphalt binder, et al.
- Lignin bioconversion into biofuels: lipid, PHA
- Biomass pretreatment

Artificial Wood Cell Wall:

- Honeycomb-patterned bacterial cellulose film as wood cell wall bio-mimicking model
- Hemicellulose functions in lignin deposition and formation
- Wood cell wall microstructure
- Wood cell wall mechanical performances

Lignin Chemistry:

- Lignin fractionation and structural modification
- Lignin structure redesigning
- Lignin characterization: wet-chemical method, NMR (^{1}H, ^{13}C, ^{31}P, 2D), HPLC, GPC, GC/MS, FTIR, et al.

Education

Postdoc	2016.1~present	Texas A&M University (College Station, USA)
Ph.D	2011.10~2015.9	Hokkaido University (Sapporo, Japan)
Master	2008.9~2011.7	China National Pulp & Paper Research Institute (Beijing, China)
Bachelor	2004.9~2008.7	South China University of Technology (Guangzhou, China)

Conferences Talk

- **Li Q**, Tasaki Y, Koda K, Uraki Y. Dehydrogenative polymerization of coniferyl alcohol on the xylan-deposited honeycomb-patterned cellulose films. **13th European Workshop on Lignocellulosics and Pulp**, June 24-27, **2014**, Seville, Spain
- **Li Q**, Tasaki Y, Koda K, Uraki Y. DHP formation in the matrix of hemicelluloses-deposited honeycomb patterned cellulose. **The XXVIIth International Conference on Polyphenols**, Sept. 2-6, **2014**, Nagoya,

Japan

- **Li Q**, Tasaki Y, Yoshinaga A, Takabe K, Koda K, Uraki Y. Xylan as a scaffold for DHP deposition on cellulose. **International Symposium on Wood Science & Technology 2015**, Mar. 15-17, **2015**, Tokyo, Japan
- Uraki Y, **Li Q**, Bardant T B, Koda K. Honeycomb-patterned cellulose films as a promising tool to investigate deformation of wood cross section and wood cell wall formation. **249th ACS National Meeting & Exposition**, Mar. 22-26, **2015**, Denver, USA
- **Li Q**, Ogawa M, Koda K, Yoshigawa A, Takabe K, Uraki Y. The Function of Xylan in Lignification. **60th Lignin Symposium**, Nov. 5-6, **2015**, Tsukuba, Japan

Research Support

- Texas A&M Energy Institute, 2016-2017, Co-PI and lead scientist, ~$50,000