# **Qiang LI**

# Synthetic & Systems Biology Innovation Hub (SSBiH),

### Department of Plant Pathology & Microbiology, Texas A&M University

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#### Education

Postdoc Research Associate: Texas A&M University, 2016.01~now (Dr. Joshua Yuan's lab)

Topics: Lignin carbon fiber; Lignin composite materials; Biofuels; Lignin structure; Lignin characterization

Ph.D: Forest Chemistry, Hokkaido University (Japan), 2011.10~2015.9 (Dr. Yasumitsu Uraki's lab)

Topics: Artificial wood cell wall; Honeycomb cellulose film; Xylan-lignin relationship; Lignin structure

**Master:** Pulp & Paper Making, China National Pulp & Paper Research Institute (Beijing, China), 2008.9~2011.7 (*Dr. Jingang Liu's* lab)

Topics: Paper coating; Curtain coating; Wood pulping

Bachelor: Pulp & Paper Making, South China University of Technology (Guangzhou, China), 2004.9~2008.7

#### Peer-reviewed Publications -

- © <u>Li Q</u>, Serem K W, Naik T M, Xie S, Zhou F, Sue J, Liu L, Yuan J S. Impacts of Lignin Molecular Weight on Carbon Fiber Mechanical Performance. **2017**, *submitted to ChemSuSChem*.
- © <u>Li Q</u>, Xie S, Serem K W, Naik T M, Liu L, Yuan J S. Quality Carbon Fiber from Lignin. **2016**, *submitted to Green Chemistry*.
- © Xie S\*, <u>Li Q</u>\*, Zhou F, Yuan J S. Lignin as Effective Asphalt Binder. **2016**, *submitted to ACS Sustainable Chem. Eng.* (\*Co-first author)
- © Shi Y, Yan X, Li Q, Wang X, Liu M, Xie S, Chai L, Yuan J S. Directed Bioconversion of Kraft Lignin to Polyhydroxyalkanoate by *Cupriavidus basilensis* B-8 without Any Pretreatment. *Progr. Biochem.* **2016** DOI <a href="http://dx.doi.org/doi:10.1016/j.procbio.2016.10.004">http://dx.doi.org/doi:10.1016/j.procbio.2016.10.004</a>.
- © <u>Li Q</u>, Koda K, Yoshinaga A, Takabe K, Shimomura M, Hirai Y, Tamai Y, Uraki Y. Dehydrogenative Polymerization of Coniferyl Alcohol in Artificial Polysaccharides Matrices: Effects of Xylan on the Polymerization. *J. Agric. Food Chem.*, **2015**, *63*, 4613-4620.
- © Hu Y, Liu J G, <u>Li Q.</u> Influence of Different Preparation Methods of MFC on Its Strengthening Performance in Paper. *Transactions of China Pulp and Paper*, **2015**, *30*, 13-17.
- © <u>Li Q</u>, Liu J G, Wang B S. The Effect of Air on Operation Stability of Curtain Coating. *China Pulp & Paper*, **2011**, *30*, 66-71.
- © Sun J, Liu J G, Wang B S, <u>Li Q</u>. The Application of Surfactants in Curtain Coating. *China Pulp & Paper*, **2010**, *29*, 19-23.
- © <u>Li Q</u>, Xu L, Sun J. The Development and Application of Neutral Deinking Technology. *East China Pulp & Paper Industry*, **2010**, *41*, 13-16.

### Book Chapter -

© Li Q, Bardant T B, Koda K, Uraki Y. Artificial Wood Cell Wall. Book Chapter, 2016, in publication.

### Conference Publications ———

- Li Q, Tasaki Y, Koda K, Uraki Y. Dehydrogenative polymerization of coniferyl alcohol on the xylandeposited honeycomb-patterned cellulose films. 13<sup>th</sup> 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
- © <u>Li Q</u>, 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, Tokyo, Japan
- ◎ Uraki Y, <u>Li Q</u>, 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

### Patents -

- © Yuan J. S., Xie S., <u>Li Q</u>. Conversion of Lignin into Bioplastics and Lipid Fuels. *In application*.
- © Liu J., Li Q, Wang B. A Method for Measuring the Air Content of Coating. CN103884645. Authorized
- © Liu J., Wang B., <u>Li Q</u>. A Method for the Removal of Air Bubbles in Coating. Application No. CN 201210563412. *In application*.

## Research and other support -

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

#### Academic communications —

- © 2014.09 & 2015.02, visiting research student, **Laboratory of Tree Cell Biology, Kyoto University** (**Japan**), immunolabeling of xylan by antibody (*Prof. Keiji Takabe & Dr. Arata Yoshinaga*).
- © 2015.5, Qingdao Institute of Bioenergy & Bioprocess Technology, Chinese Academy of Science (*Prof. Haisong Wang & Dr. Bin Li*).
- © 2015.10, China National Pulp & Paper Institute (Beijing) (Prof. Jingang Liu).

### Company Internships & Social Activities-

- © 2011.05, Summer internship, Double A Public Co., Ltd., paper mill in Bangkok, Thailand. (1 week)
- © 2009.10-2011.05, Academic part-time copy-editor for International Pulp & Paper, China Pulp and Paper Magazines Publisher, Beijing, China. (1.5 year)
- © 2008.01-02, Graduation internship, Taishan Paper Co. Ltd., paper mill in Laiwu city, China. (1.5 month)
- © 2007.07-2007.08, Summer internship, StoraEnso Group, paper mill in Suzhou city, China. (1.5 month)
- © 2007.02, Social survey, the state-of-art: hand workshops making ancient Chinese paper (Xuan-Zhi) in Fuyang City, Zhejiang Province, China. (2 weeks)

#### Awards and Honors -

- © 2005, 2006, 2007, Excellent student, South China University of Technology
- © 2005, Yorkshire Fellowship, South China University of Technology