

BBRL NEWS:

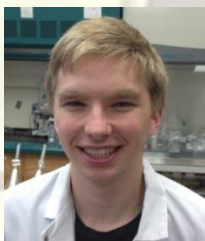
A proposal submitted by **Drs. Yebo Li and Xiaolan Luo** to the Ohio Soybean Council has been approved for funding in the amount of \$64,857.

Shengjun Hu passed his PhD dissertation defense on July 3, 2013. The title of his dissertation is *Production and Characterization of Bio-based Polyols and Polyurethanes (PU) from Biodiesel-derived Crude Glycerol and Lignocellulosic Biomass*. Congratulations to Shengjun!

Johnathon Sheets passed his Master thesis defense on July 2, 2013. The title of his thesis is *Cultivation of Nannochloropsis Salina in Diluted Anaerobic Digester Effluent under Simulated Seasonal Climatic Conditions and in Open Raceway Ponds*. Congratulations to Johnathon!

BBRL MEMBER SPOTLIGHT

Taylor Jackwood – Taylor joined the BBRL in June, 2013 as a summer intern. He graduated from Wooster High School and will be a current junior at The Ohio State University Main Campus this fall with a computer science major and physics minor. This is his fourth consecutive year working for the OARDC through the ORIP program. He has been working with Stephen Park to develop an algae growth model for open raceway ponds, and gathering data to test the model. He is interested in computer-based modeling of different scientific issues. His career goals include continuing on to graduate school to obtain degrees in computer science or another science field that he is interested in modeling. In his free time, Taylor enjoys running, playing golf, and hanging with friends.



Joshua Sun – Josh joined the BBRL in June, 2013 for his summer internship. He is currently working with Drs. Cong Li and Xumeng Ge on bio-based polyurethane foam and anaerobic digestion for biogas production, respectively. Josh graduated from Wooster High School and now is a junior in the University of Akron with a biomedical Engineering major and Business minor. He is interested in his current research on polymer compositions and waste conversion for energy. In the near future, Josh would like to find a good position with a respectable company after getting his bachelor degree in his major. He then plans to return to graduate school after gaining experience and then either continue working in industry or seek out a professorship. In his free time, Josh likes to keep active by playing ultimate frisbee, paintball, soccer, and biking. H also likes to hang out with friends and family.



Upcoming events, deadlines, and grants

Jul 11, 2013 – Jia Zhao's thesis defense
 Jul 15, 2013 abstract due to BioRecycle Conference
 Jul 21-24, 2013 – ASABE Annual Meeting (Kansas City)

BBRL RESEARCH

2013 Publications

Cai, T., Ge, X. M., Park, Y. S., Li, Y. B. 2013. Comparison of *Synechocystis* sp. PCC6803 and *Nannochloropsis salina* for lipid production using nutrients from anaerobic digestion effluent. *Bioresource Technology*, in press.

Wang, Z. J., Xu, F. Q., Li, Y. B. 2013. Effects of total ammonia nitrogen concentration on solid-state anaerobic digestion of corn stover. *Bioresource Technology*, in press.

Cai, T., Park S., Siam Racharaks, Li, Y. B. 2013. Cultivation of *Nannochloropsis salina* in anaerobic digestion effluent for nutrient removal and lipid production. *Applied Energy*. 108 (2013) 486-492.

Canam, T., Dumonceaux. T. J., Record E., Li, Y. B. 2013. White Rot Fungi: The key to sustainable biofuel production? *Biofuels* 4(3):247-250.

Luo, X. L., Hu, S. J., Zhang, X., Li, Y. B. 2013. Thermochemical conversion of crude glycerol to biopolyols for the production of polyurethane foams. *Bioresource Technology* 139:323-329.

Shi, J., Wang Z. J., Stiverson, J. A., Yu, Z. T., Li, Y. B. 2013. Reactor performance and microbial community dynamics during solid-state anaerobic digestion of corn stover at mesophilic and thermophilic conditions. *Bioresource Technology*. 136:574-581

Cai, T., Park, S., Li, Y. B. 2013. Nutrient recovery from wastewater streams by microalgae: status and prospects. *Renewable and Sustainable Energy Reviews* 19: 360-369.

Cherosky P., Li, Y. B. 2013. Hydrogen sulfide removal from biogas by bio-based iron sponge. *Biosystems Engineering* 114:55-59

Xu, F. Q., Shi, J., Lv, W., Yu, Z. T., Li, Y. B. 2013. Comparison of different liquid anaerobic digestion effluents as inoculum and nitrogen sources for solid-state batch anaerobic digestion of corn stover. *Waste Management* 33: 26–32.

Wan, C. X. and Li, Y. B. 2013. Solid-state biological pretreatment of lignocellulosic biomass for biofuel production. In "Green biomass pretreatment and processing methods for bioenergy production". Edited by Gu, Tingyue. Netherlands: Springer. 67-86.

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Newsletter

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