

Si-Yu Li, Ph.D.

Department of Chemical Engineering
National Chung Hsing University
250 Kuo-Kung Rd.
Taichung City 40227, Taiwan
Phone: 886-4-2284-0510 Ext.509
E-mail: syli@dragon.nchu.edu.tw



EDUCATION

- 2006-2010 **Ph.D.** in Chemical Engineering, University of Connecticut, USA
2003-2005 **M.S.** in Chemical Engineering, National Chung Hsing University, Taiwan
1999-2003 **B.S.** in Chemical Engineering, National Chung Hsing University, Taiwan

PROFESSIONAL EXPERIENCE

- 2015 - Present **Associate Professor**, Department of Chemical Engineering, National Chung Hsing University, Taichung, Taiwan
Research interests : biofuel production ; bioplastic production ; CO₂ recycling
2011 - 2015 **Assistant Professor**, Department of Chemical Engineering, National Chung Hsing University, Taichung, Taiwan

PUBLICATIONS

SCI Peer-Reviewed Papers

1. Li, Y.-H., O.-Y. FY, C.-H. Yang, & **Li, S.-Y.*** (2015) The coupling of glycolysis and the Rubisco-based pathway through the non-oxidative pentose phosphate pathway to achieve low carbon dioxide emission fermentation. (accepted in *Bioresource Technology*)
2. Lu, K.-M. & **Li, S.-Y.*** (2014) An integrated *in situ* extraction-gas stripping process for Acetone-Butanol-Ethanol (ABE) fermentation. *Journal of the Taiwan Institute of Chemical Engineers*, 45, 2106-2110.
3. Ciou, C.-Y., **Li, S.-Y.**, & Wu, T.-M.* (2014) Morphology and degradation behavior of poly(3-hydroxybutyrate-co-3-hydroxyvalerate)/layered double hydroxides composites. *European Polymer Journal*, 59, 136-43.
4. Liao, Y.-C., Lu, K.-M. & **Li, S.-Y.*** (2014) Process parameters for operating 1-butanol gas stripping in a fermentor. *Journal of Bioscience and Bioengineering*, 118, 558-64.
5. Zhuang, Z.-Y. & **Li, S.-Y.*** (2013) Rubisco-based engineered *Escherichia coli* for *in situ* carbon dioxide recycling. *Bioresource Technology*, 150, 79-88.
6. Ho, M.-H., **Li, S.-Y.**, Ciou, C.-Y. & Wu, T.-M.* The morphology and degradation behavior of electrospun poly(3-hydroxybutyrate)/magnetite and poly(3-hydroxybutyrate-co-3-hydroxyvalerate)/magnetite composites. *Journal of Applied Polymer Science* (Article in press, DOI: 10.1002/app.41070)
7. Chen, S.-K., Chin, W.-C., Tsuge, K., Huang, C.-C., & **Li, S.-Y.*** (2013). Fermentation approach for enhancing 1-butanol production using engineered butanogenic *Escherichia coli*. *Bioresource Technology*, 145, 204-9.

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8. **Li, S.-Y.**, Srivastava, R., Suib, S.L., Li, Y., & Parnas, R.S.* (2011). Performance of batch, fed-batch, and continuous A-B-E fermentation with pH-control. *Bioresource Technology*, 102, 4241-50.
9. **Li, S.-Y.**, Srivastava, R., & Parnas, R.S.* (2011). Study of *in situ* 1-butanol pervaporation from A-B-E fermentation using a PDMS composite membrane: Validity of solution-diffusion model for pervaporative A-B-E fermentation. *Biotechnology Progress*, 27, 111-20.
10. **Li, S.-Y.**, Srivastava, R., & Parnas, R.S.* (2010). Separation of 1-butanol by pervaporation using a novel tri-layer PDMS composite membrane. *Journal of Membrane Science*, 363, 287-94.
11. **Li, S.-Y.**, Stuart, J.D., Li, Y., & Parnas, R.S.* (2010). The feasibility of converting industrial hemp oil into biodiesel. *Bioresource Technology*, 101, 8457-60.

PATENTS

1. 李思禹, 盧冠銘 (2014) 大量製備發酵產物之方法. 中華民國專利申請案號: 103122199.
2. 李思禹, 莊宗諭, 李亞翰, 歐陽芳鈺. (2012) 用於對糖發酵形成發酵產物之微生物. 中華民國專利申請案號: 101149099.
3. 李思禹, 莊宗諭. (2012) 用於對受質發酵形成發酵產物之微生物. 中華民國專利申請案號: 101149099.
4. Parnas, R.S. & **Li, S.-Y.** (2010). Pervaporation composite membrane for aqueous solution separation and methods for using the same. US 12/859,364.