

Akarin Boonsombuti

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Objective

To seek a position involving with a great career potential in the field of environmental and energy science. Gain experience in teaching and research versatile in a worldwide trend, and develop interpersonal skill along with a firm that never stop improving to be one of the professional instructors.

Education

M.S.-Ph.D. (Petrochemical Technology): GPA 3.68 **2007-2012**

The Petroleum and Petrochemical College, Chulalongkorn University, Bangkok, Thailand

Thesis: *Alcohol Fuels Production by Fermentation from Chemical Pretreatment and Enzymatic Saccharification of Corncob*

B.S. First-class Honors (Physics): GPA 3.73 **2002-2006**

Faculty of Science, Kasetsart University, Bangkok, Thailand

Publications

1. Boonsombuti, A., Luengnaruemitchai, A., Wongkasemjit, S. Enhancement of enzymatic hydrolysis of corncob by microwave-assisted alkali pretreatment and its effect in morphology (2013) *Cellulose*, 20 (4), pp. 1957-1966.
2. Boonsombuti, A., Komolpis, K., Luengnaruemitchai, A., Wongkasemjit, S. Enhancement of ABE fermentation through regulation of ammonium acetate and D-xylose uptake from acid-pretreated corncobs (2013) *Annals of Microbiology*, 64 (2), pp. 431-439.
3. Boonsombuti, A., Luengnaruemitchai, A. & Wongkasemjit, S. Effect of Phosphoric Acid Pretreatment of Corncobs on the Fermentability of *Clostridium beijerinckii* TISTR 1461 for Biobutanol Production. *Prep Biochem Biotech* 45, 173-191, doi:Doi 10.1080/10826068.2014.907179 (2015).
4. Boonsombuti, A., Tangmanasakul, K., Komolpis, K., Luengnaruemitchai, A., Wongkasemjit, S. Production of biobutanol from acid pretreated corncob using *Clostridium beijerinckii* TISTR 1461: Process optimization studies, *Prep Biochem Biotech (Article in Press)*
5. Vichuviwat, R., Boonsombuti, A., Luengnaruemitchai, A. & Wongkasemjit, S. Enhanced butanol production by immobilized *Clostridium beijerinckii* TISTR 1461 using zeolite 13X as a carrier. *Bioresour Technol* 172, 76-82, doi:Doi 10.1016/J.Biortech.2014.09.008 (2014).

Conference Proceedings

1. Boonsombuti, A.; Luengnaruemitchai A. (2011, October 10-14) Optimized condition for biobutanol production from acid pretreated corncobs using *C. beijerinckii*. Proceeding of the ISAF XIX 2011 (19th International Symposium on Alcohol Fuels), Verona, Italy
2. Boonsombuti, A.; Luengnaruemitchai A. (2010, June 27-July 2) The comparative study of glucose consumption between *C. acetobutylicum* and *C. beijerinckii*. Oral presented at Renewable energy 2010 join with the 4th International solar energy society conference asia pacific region, Yoghama, Japan
3. Boonsombuti, A.; Chattham, N. (2007, 21-22 March) The Study and Analysis of Lipid Nano Tubules. Oral presented at the 2nd Conference on Science and Technology for Youths, Bangkok, Thailand

Research experiences

Postdoctoral Fellow

July 2013-Jul 2014

The Petroleum and Petrochemical College, Chulalongkorn University, Bangkok, Thailand

Advisor: Assoc. Prof. Apanee Luengnaruemitchai

Topic: Enhanced butanol production by immobilized *Clostridium beijerinckii* TISTR 1461 using porous materials as a carrier.

Visiting PhD student

Apr 2011-Apr 2012

System Biology Group, Chalmers University of Technology, Göteborg, Sweden

Advisor: Prof. Jens Neilsen

Topic: Alkene Production by Recombinant *Saccharomyces cerevisiae*

Student Assistant (SA): English Camp Activity

2008

The Petroleum and Petrochemical College, Chulalongkorn University Bangkok, Thailand

Student Internship: Thailand Advanced Institute of Science and Technology's Pilot Project Mar-May 2006

National Nanotechnology Center (NANOTEC), National Science and Technology Development Agency Thailand Science Park Pathumthani, Thailand

Project: Coating TiO_2 on Activated Carbon Surface Improving the Agricultural Products

Scholarship and Award

- Full scholarship from Development and Promotion of Science and Technology Talents Project (DPST) Since 2004
- Awards from Professor Tab Nilaniti foundation for Bachelor of Science

Skills

Foreign languages

Excellent communication in English skills

Computer software

Microsoft Office, Apple iWork, Prezi, MATLAB, SPSS, R programming, Adobe Photoshop

References

Assoc. Prof. Apanee Luengnaruemitchai (Thesis Advisor)

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Email: apanee.l@chula.ac.th

Prof. Jens Neilsen

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Kemivägen 10, SE-412 96 Göteborg, Sweden

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