



Name: Prof.Dr. Poonsuk Prasertsan

Education

Degree: Ph.D. (Biotechnology), University of Queensland, Australia
M.Sc.St. (Biotechnology), University of Queensland, Australia
B.Sc. (Food Science) Kasetsart University, Thailand

Present employment :

2004- Present : Associate Professor
1993- 2004 : Associate Professor, Head of Department Faculty of Agro-Industry, Prince of Songkla University (PSU)
1989-1992 : Assistant Professor, Dept. of Agro-Industry, Faculty of Natural Resources, PSU
1987-1989 : Lecturer, Dept. of Agro-Industry, Faculty of Natural Resources.
1983-1987 : Received AIDAB Scholarship for Ph.D. study in Australia
1981-1983 : Lecturer in Dept. of Agro-Industry, Faculty of Natural Resources, Prince of Songkla University
1979-1981 : Study for Master Degree in Australia
1977-1979 : Working as Head's assistant in the Quality Control Section in a fruit and vegetable canning factory

Present employment :

Department of Industrial Biotechnology
Faculty of Agro-Industry Prince of Songkla University
Hat Yai, Songkhla 90112 Thailand
Tel: (66-74) 286369
Fax (66-74) 558866
Email: poonsuk.p@psu.ac.th

Field of interest : Environmental Biotechnology, Waste Utilization, Wastewater Treatment

Current researches :

1. Process development for production of valuable bioproducts such as ALA, enzymes, biopolymers (EPS, PHB, co-polymer), 1,3-propanediol, bioactive compound, compost, SCP, etc. from agro-industrial wastes and their applications
2. Improvement of wastewater treatment system
3. Biohydrogen production using dark- and photo-fermentation

Publication:

- Boukaew, S. and **Prasertsan, P.** 2013. Factors affecting antifungal activity of *Streptomyces philanthi* RM-1-138 against *Rhizoctonia solani*. World J Microbiol Biotechnol. DOI 10.1007/s11274-013-1424-z.
- Boukaew, S., Plubrukam, A. and Prasertsan, P. 2013. Effect of volatile substances from *Streptomyces philanthi* RM-1-138 on growth of *Rhizoctonia solani* on rice leaf. BioControl. DOI 10.1007/s10526-013-9510-6.
- Boukaew, S., Klinmanee, C. and Prasertsan, P. 2013. Potential for the integration of biological and chemical control of sheath blight disease caused by *Rhizoctonia solani* on rice. World J Microbiol Biotechnol. DOI 10.1007/s11274-013-1353-x.
- Sattayasamitsathit, S. and **Prasertsan, P.** 2013. Improvement of 5-aminolevulinic acid production by *Rubrivivax benzoatilyticus* PS-5 with self-flocculation by co-fermentation of precursors and volatile fatty acids under pH-controlled condition. Annal Microbiol. DOI 10.1007/s13213-013-0637-6.
- Sattayasamitsathit, S. and **Prasertsan, P.** 2013. Characterization of a newly isolated *Rubrivivax benzoatilyticus* PS-5 with self-flocculation property and optimization pathway for 5-aminolevulinic acid production. Afr J. Biotech. 12:2069-2081.
- Nutongkaew, T., Duangsuwan, W., Prasertsan, S., and Prasertsan, P. 2013. Physicochemical and biochemical changes during composting of different mixing ratios of biogas sludge with palm oil mill wastes and biogas effluent. J. Mater. Cycles Waste Manag. DOI 10.1007/s10163-013-0165-2.
- Sangkharak, K. and **Prasertsan, P.** 2013. The production of polyhydroxyalkanoates in *Bacillus licheniformis* using sequential mutagenesis and optimization. Biotechnol. Bioproc. E. 18(2) : 272-279.
- Sangkharak, K. and **Prasertsan, P.** 2013. Municipal wastes treatment and production of polyhydroxyalkanoate by modified two-stage batch reactor. J. Polym. Environ. (accepted).
- Chookaew, T., O-Thong, S. and Prasertsan, P. 2012. Fermentative production of hydrogen and soluble metabolites from crude glycerol of biodiesel plant by the newly isolated thermotolerant *Klebsiella pneumoniae* TR17. Int. J Hydrogen Energy. 37: 13314-13322.
- Yossan, S., O-Thong, S. and **Prasertsan, P.** 2012. Effect of initial pH, nutrients and temperature on hydrogen production from palm oil mill effluent using thermotolerant consortia and corresponding microbial communities. Int. J Hydrogen Energy. 37: 13806-13814.
- Noparat, P., **Prasertsan P.** and O-Thong S. 2012. Potential for using enriched cultures and thermotolerant bacterial isolates for production of biohydrogen from oil palm sap and microbial community analysis. Int. J Hydrogen Energy. 37: 16412-16420.
- Petlamul, W. and **Prasertsan, P.** 2012. Evaluation of strains of *Metarhizium anisopliae* and *Beauveria bassiana* against *Spodoptera litura* on the basis of their virulence, germination rate, conidia production, radial growth and enzyme activity. Mycobiology. 40(2) : 111-116.
- Sangkharak, K. and **Prasertsan, P.** 2012. Screening and identification of polyhydroxy-alkanoates producing bacteria and biochemical characterization of their possible application. J. Gen. Appl. Microbiol. 58(3): 173-182.
- Riansa-ngawong, W., Suwansa-ard, M. and **Prasertsan, P.** 2012. Application of palm pressed fiber as a carrier for ethanol production by *Candida shehatae* TISTR5843. Electronic J. Biotechnology. (<http://www.ejbiotechnology.info>, DOI :10.2225/vol 15-issue6-fulltext-1)
- Mamimin, C., Thongdumyu, P., Hniman, A., **Prasertsan, P.**, Imai, T. and O-Thong, S. 2012. Simultaneous thermophilic hydrogen production and phenol removal from palm oil mill effluent by Thermoanaerobacterium-rich sludge. Int. J Hydrogen Energy.
- Noparat, P., **Prasertsan P.** and O-Thong S. 2011. Isolation and characterization of high hydrogen-producing strain *Clostridium beijerinckii* PS-3 from fermented oil palm sap. Int J Hydrogen Energy. 36: 14086-14092.

- Hniman A., O-Thong S., and **Prasertsan P.** 2011. Community analysis of thermophilic hydrogen-producing consortia enriched from Thailand hot spring with mixed xylose and glucose. *Int J Hydrogen Energy*.36: 14217-14226.
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- Sattayasamitsathit, S., **Prasertsan, P.** and Methacanon, P. 2011. Enhanced 1,3-propanediol production from crude glycerol of biodiesel plant by using pH control and different feeding strategies in fed-batch fermentation of *Klebsiella pneumoniae* SU6. *Electronic J. Biotech.* ISSN: 0717-3458. DOI: 10.2225/vol14-issue6-full text-6.
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