

รศ.ดร.จงจินต์ ผลประเสริฐ

CHONGCHIN POLPRASERT, Ph.D.



**Position:** Associate Professor

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#### **Education**

Ph.D.( Environmental Engineering), Illinois Institute of Technology, USA

M.Eng.(Environmental Engineering), Asian Institute of Technology, Thailand

B.Eng. (Environmental Engineering), Chiangmai University, Thailand

#### **Expertise**

1. Biochemical Engineering – Application of mathematical modeling to biological processes and biological waste treatment
2. Water Chemistry – Fundamental and advanced principles of environmental chemistry; its application to water and wastewater treatment engineering
3. Pollutant Transport – Movement of chemical in air, water, and soil

#### **Research Interests and Field of Specialization**

Biological process

Waste recovery and recycling

Application of carbon-balanced model for sustainable development

## **Selected Publications:**

WithidaPatthanaissaranukool and ChongchinPolprasert(2016), Reducing carbon emissions from soybean cultivation to oil production in Thailand; Journal of Cleaner Production, 131, 170 – 178.

ThanakritNeamhom, ChongchinPolprasert and Andrew J. Englande (2016), Ways that sugarcane industry can help reduce carbon emissions in Thailand; Journal of Cleaner Production, 131, 561 – 571.

BussarakamThitanuwat, ChongchinPolprasert and Andrew J. Englande (2016), Quantification of phosphorus flows throughout the consumption system of Bangkok Metropolis, Thailand; Science of the Total Environment, 542, 1106 – 1116.

ChongchinPolprasert,WithidaPatthanaissaranukool and Andrew J. Englande (2015), A choice between RBD (refined, bleached, and deodorized) palm olein and palm methyl ester productions from carbon movement categorization; Energy, 88, 610 – 620.

KampolNanthapong and ChongchinPolprasert(2013), Carbon balance in municipal solid waste management--a case study of Nonthaburi municipality, Thailand; Journal of the Medical Association of Thailand, 96(5), S190 – 197.

WithidaPatthanaissaranukool, ChongchinPolprasert and Andrew J. Englande (2013), Potential reduction of carbon emissions from Crude Palm Oil production based on energy and carbon balances; Applied Energy, 102, 710 – 717.

WithidaPatthanaissaranukool and ChongchinPolprasert (2011),Carbon mobilization in oil palm plantation andmilling based on a carbon-balanced model – A case study in Thailand; EnvironmentAsia, 4(2), 17 – 26.

ThaneeyaPerbangkhem, DoulayeKone and ChongchinPolprasert (2011), Energy distribution in oxidation pond and constructed wetland treating a domestic wastewater, Australian Journal of Basic and Applied Sciences, 5 (7), 430 – 439.

WithidaPatthanaissaranukool and ChongchinPolprasert (2010), Investigation of Carbon Equivalence for Oil Palm Plantation Based on A Carbon-Balanced Model – A Case Study in Thailand, GMSARN InternationalConference on Sustainable Development: Challenges and Opportunities in GMS, 17 – 19 November 2010, LuangPrabang, the Lao People’s Democratic Republic.

ThaneeyaPerbangkhem, ChongchinPolprasert (2010). Biomass production of papyrus (Cyperus papyrus) inconstructed wetland treating low-strength domestic wastewater. Bioresource Technology, 101 (January): 833 – 835.

YuwadeeChaiyachet and ChongchinPolprasert(2009). Investigation of Carbon Equivalence and Land Requirementfor Rice Cultivation – A Case Study in Thailand, Journal of Applied Sciences Research, 5(12), 2489 – 2495.

### **Selected Publications:**

YuwadeeChaiyachet, PrayoonFongsatitkul, SudhinYoosook, and ChongchinPolprasert (2009); Evaluation of carbon equivalence for rice cultivation – A case study in Thailand, GMSARN International Conference on Energy Security and Climate Change: Problems & Issues in GMS, 25 – 27 November 2009, Halong, Vietnam.

ChongchinPolprasert and YuwadeeChaiyachet (2007); Biological Potential – A concept for sustainable development based on a carbon-balanced model, GMSARN International Conference on Sustainable Development: Challenges and Opportunities for GMS, 12 – 14 December 2007, Pattaya, Thailand.

ChongchinPolprasert and ThaneeyaPerbangkhem (2006); Energy capturing efficiency and productivity of papyrus (*Cyperus Papyrus*) in constructed wetland treating domestic wastewater; Proceedings of The 7th IWASpecialist Conference on Waste Stabilization Ponds, September 25-27, 2006, Bangkok, Thailand.

ChongchinPolprasert, AswinSuebnuakarn and LersakKosungnoen (2000), Development of a small-scale solid waste incinerator for Tambon Administration Organization; Paper presented at the 5th National Symposium on Environmental Technology and Management : Theme “Green Productivity and Sustainable Technology in Environmental Control” organized by the Department of Environmental Engineering, Faculty of Engineering, Chiang Mai University, November 2-3, 2000, Chiang Mai, Thailand.

ChongchinPolprasert and Alisarajitmanee (2000), Land treatment of swine wastewater using overland flow system; Paper presented at the 5th National Symposium on Environmental Technology and Management : Theme “Green Productivity and Sustainable Technology in Environmental Control” organized by the Department of Environmental Engineering, Faculty of Engineering, Chiang Mai University, November 2-3, 2000, Chiang Mai, Thailand.

ChongchinPolprasert and SompopSnograi (1998), Iron recovery from waste pickle liquor; Suranaree Journal of Science and Technology, Vol.5, No.1, pp. 24-31; January – April 1998.