



Associated Professor. Dr. Duangrat Inthorn



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Education:

- 1984-1987 Chulalongkorn University, Bangkok, Thailand: B.Sc. in Microbiology
1988-1991 Chulalongkorn University, Bangkok, Thailand: M.Sc. in Biotechnology. Field and major thesis "Isolation and Optimization Spirulina Cultures for Phycocyanin Production".
1993-1997 Ph.D. (Pharmaceutical Science) Doctor of Philosophy in Pharmaceutical Science in Environmental Biotechnology form Environmental Bioengineering Laboratory, Faculty of Pharmaceutical Sciences, Osaka University. Field and major thesis "Selective Removal of Cadmium Ion by the Filamentous Cyanobacterium *Tolypothrix tenuis*"

Academic Awards:

1. Oral presentation in RGJ-Ph.D. Congress 19. Innovation Challenges toward Thailand 4.0. Research Inspiration, Connectivity and Transformation, Jomtein Palm Beach Hotel & Resort, Pattaya , Thailand, June 7-9, 2018. Suyamud B, Thiravetyan P, Panyapinyopol B, Inthorn D. Bisphenol A removal by the Draceana plant-endophytic bacteria interactions: Potential and application in water treatment on 8 June 11.00 pm at Palm Beach 2 room. (Outstanding oral presentation award from RGJ-Ph.D program, the Thai Research Fund).
2. Poster section: Sontong M, Thiravetyan P, Silapanuntakul S, Inthorn D Phytoremediation of bisphenol A. The 8th Annual Conference of Center of Excellence on " Trends in Research on Environmental Health" , November 28-29, 2015 at Convention Center, Chulabhorn Research Institute, Bangkok (Awarded third prize Champion's Trophy Bronze Medal in the category research from the Center of Excellence on Environmental Health and Toxicology).
3. Tipprasertsin D., Inthorn D, Thiravetyan P, Khan E. Textile wastewater treatment by using treated flute reed in a fix bed column. Oral presentation in ASIAN WATERQUAL2003 IWA Asia-Pacific Regional Conference, The Imperial Queen's Park Hotel, Bangkok Thailand. 22 October 2003. (Outstanding Thesis award for Oral

presentation in International Conference from Graduated School, Mahidol University, 2003)

Present Employment:

1. Department of Environmental Health Sciences, Faculty of Public Health, Mahidol University 1997-
2. Kao Industrial Company during 1992-1993

Research Interests and Field of Specialization:

1. Phytoremediation of heavy metal (Cd, Pb, Cr and Zn) and endocrine disrupting chemical (Bisphenol A)
2. wastewater treatment
3. Algal Cultivation

Academic Research Projects/Responsibilities:

1. GEOHealth HUB: Improving agricultural Health in Southeast Asia: Paired Research (U01) and Training Grants (U2R) Title: To provide mentored training to post-doctoral scientists and medical personnel, resulting in research that will identify agricultural health hazards and solutions: Trainee Mentor during 2016-2021
2. The Royal Golden Jubilee Ph.D. Program, the Thailand Research Fund (TRF) 21, 2018-2022
3. Center of excellent on Environmental Health and Toxicology, Title: Innovative technology for production, detection, treatment, detoxification, remediation, reduction, reuse and recycling of chemicals during 2014-2016
4. The Royal Golden Jubilee Ph.D. Program, the Thailand Research Fund (TRF) 16 during 2015-2019, Title: Phytoremediation of Bisphenol A by *Dracaena sanderiana* and their plant microbe interaction, Host Professor G.M. Gadd, University of Dundee, Scotland, UK
5. Chinese Mediacl Board (CMB), Faculty of Public Health, Mahidol University, Title: Biodegradation of bisphenol A by using *Dracaena* plant and maternal and fetal exposure to bisphenol A during 2012-2014

Publication lists:

1. Suyamud B, Thiravetyan P, Panyapinyopol B, Gadd G, Inthorn D. Bisphenol A removal from a plastic industry wastewater by *Dracaena sanderiana* -endophytic bacteria interactions and *Bacillus cereus* NI : Major revised :Environmental Science and Pollution Research
2. Suyamud B, Thiravetyan P, Panyapinyopol B, Inthorn D. Biodegradation of Bisphenol A by the newly isolated *Bacillus megaterium* strain ISO-2 from a polycarbonate industrial wastewater. Minor revise: Applied Microbiology Biotechnology
3. Suyamud B, Thiravetyan P, Panyapinyopol B, Inthorn D. *Dracaena sanderiana* endophytic bacteria interactions: Effect of endophyte inoculation on bisphenol A removal. Ecotoxicity Environmental Safety 2018;157:318–326

4. Sooksawat N, Meetam M, Kruatrachue M, Pokethitiyook P, Inthorn D. Performance of packed bed column using *Chara aculeolata* biomass for removal of Pb and Cd ions from wastewater. *Journal of Environmental Science Health A Tox Hazard Subst Environ Eng* 2017;52(6):539–546
5. Leechart , Inthorn D and Thiravetyan P. Adsorption of antimony by bagasse fly ash: chemical modification and adsorption mechanism. *Water Environment Research* 2016;88 (9): 907-912
6. Sooksawat N, Meetam M, Kruatrachue M, Pokethitiyook P, Inthorn D . Equilibrium and kinetic studies on biosorption potential of Charophyte biomass to remove heavy metals from synthetic metal solution and municipal wastewater. *Bioremediation Journal* 2016; 20 (3): 240-251
7. Saiyood S, Inthorn D, Vangnai A, Thiravetyan P. 1,2-dichloroethane removal by *Bruguiera gymnorhiza* (L.) Lamk and *Pseudomonas putida* BCC 23535. *Water Science Technology: Water Supply* 2016;(165):1313–1319
8. Leechart P, Inthorn D, Thiravetyan P. Effect of NaCl on antimony and phthalate compound leached from PET bottles. *Water Science and Technology: Water Supply*, 2015; 15(4): 766-772
9. Koonsom T, Inthorn D, Srisai S, Thiravetyan P Effect of kaolin on arsenic accumulation in rice plant (*Oryza sativa* L.) grown in arsenic contamination soils. *Environmental Engineering Research* 2014; 19(3), 241-245
10. Inthorn D, Tani Y, Chang J, Naitou H, Miyata N. Magnetically modified fungal Mn oxides with high sequestration efficiency for simultaneously removing multiple heavy metal ions from wastewater. *Journal of Environmental Chemical Engineering* 2014;2:1635–1641

Presentations/Proceeding:

1. Poster section: Sontong M, Thiravetyan P, Silapanuntakul S, Inthorn D
Phytoremediation of bisphenol A. The 8th Annual Conference of Center of Excellence on “Trends in Research on Environmental Health” , November 28-29, 2015 at Convention Center, Chulabhorn Research Institute, Bangkok. (Awarded third prize Champion’s Trophy Bronze Medal in the category research).
2. Poster section: Kumpiranon C, Thiravetyan P, Polprasert S, Inthorn D Effect of LED light on phytoremediation of bisphenol A by *Hapalosiphon hibernicus* in Princess congress: Environmental Health: Inter-linkages Among the Environment, Chemicals and Infectious Agents, November 13-17, 2016, Shangri-La Hotel, Bangkok, Thailand, organized by the Chulabhorn Research Institute
3. Invited speaker: Inthorn D, Special Seminar (Institution Seminar) Title Removal of bisphenol A by plant, 5 June 2013, 14.00-15.30 p.m. by Duangrat Inthorn, meeting room, Shizuoka University, Japan.

4. Invited speaker: Inthorn D, Special Seminar (Institution Seminar) Bioremediation of heavy metals (As) and bisphenol A by microalgae and plant , meeting room , Akita Akita Prefecture University, Japan 10 May 2013, 16.00-17.30 p.m.
5. Oral presentation in RGJ-Ph.D. Congress 19. Innovation Challenges toward Thailand 4.0. Research Inspiration, Connectivity and Transformation, Jomtein Palm Beach Hotel & Resort, Pattaya , Thailand, June 7-9, 2018. Suyamud B, Thiravetyan P, Panyapinyopol B, Inthorn D. Bisphenol A removal by the Draceana plant-endophytic bacteria interactions: Potential and application in water treatment on 8 June 11.00 pm at Palm Beach 2 room. (Outstanding oral presentation award from RGJ-Ph.D program, the Thai Research Fund