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EDUCATION

- 1997 Ph.D. in Civil and Environmental Engineering, University of Wisconsin-Milwaukee, WI, with minor in industrial engineering
- 1994 M.S. in Civil and Environmental Engineering, University of Pittsburgh, PA.
- 1990 B. Eng. in Environmental Engineering, Chulalongkorn University, Bangkok, Thailand.

PROFESSIONAL EXPERIENCES

- 2011-Current Head of Solid Waste Lab
- 2011-2015 Deputy Head of Department of Environmental Engineering (Personnel)
- 2002 Lecturer, Department of Environmental Engineering, Chulalongkorn University
- 2002-2011 Secretary, Department of Environmental Engineering, Chulalongkorn University
- 2001 Chairperson of Environmental Technology Program, Sirindhorn International Institute of Technology (May to October)
- 1999-2001 Assistant Professor, Environmental Technology Program, Sirindhorn International Institute of Technology, Thammasat University
- 1998 Assistant Professor, Department of Civil Engineering, Sirindhorn International Institute of Technology, Thammasat University
- 1995-97 Research Assistant, Department of Civil Engineering and Mechanics, University of Wisconsin-Milwaukee, *focusing on Lake Michigan sediment contamination*
- 1992-94 Research Assistant, Department of Civil and Environmental Engineering, University of Pittsburgh, *focusing on landfill management project in Delaware*
- 1990 Boonyium and Associate Company, environmental and service engineer for boiler, water treatment, incinerators

SELECTED CONSULTING EXPERIENCES

- 2014-15 Consultant to various solid waste site reclamation and energy recovery
- 2013 Head of the project “Recycling Technology Review for Industrial Wastes” funded by Department of Primary Industries and Mining
Job: Review and assess recycling technologies for gold extraction from circuit boards, and energy from plastics, tires, and wood wastes”
- 2010-2011 Head of the project “Preparation for Greenhouse Gas Management for Iron and Steel Industries in Thailand” funded by Thailand Research Fund
Job: Select method for GHG database creation, baseline assessment, reduction method selection, and Thailand strategic assessment

- 2004-Current Researcher on biogas production project with Dr. Chackrit Neungchamnon, Faculty of Veterinary Science, Chulalongkorn University
- 2011 Expert on the project “Green Job Thailand: A case of Thai Hotel Industries” with Thailand Management Association
Job: Develop a training program on employee engagement in hotels for better environment
- 2010 Researcher on the project “Biogas production and cleanup of gas” funded by NEDO and Hitachi Engineering Services (HES), Japan
Jobงานที่ทำ: Design and operate lab-scale biogas system from chicken waste for NEDO and HES
- 2010 Translator and trainer for IPCC 1996 and 2006 guidelines for GHG calculation for Bright Management and Services CO. LTD.
Jobงานที่ทำ: Translate and train iron and steel industries with respect to IPCC 1996 and 2006 guidelines
- 2002-2004 Coordinator and consultant for GENCO for operation of wastewater treatment plant at Sa-mae dam and hazardous waste landfill at Ratcha buri province.
- 2001 Researcher on Thailand competitiveness with respect to FTA in Engineering Education for Thai Council of Engineers

THESIS AND DISSERTATION

1. Rachdawong, P. Receptor Models for Source Attribution of PAHs and PCBs in Lake Michigan Sediments, Ph.D. Dissertation, Department of Civil Engineering and Mechanics, University of Wisconsin-Milwaukee, WI, 1997.
2. Rachdawong, P. Use of Recycled Carpets During Landfill Management of Solid Wastes, M.S. Thesis, Department of Civil and Environmental Engineering, University of Pittsburgh, PA, 1994.

INTERNATIONAL PUBLICATIONS

1. Teerachark, P. and Rachdawong, P. 2012. Effects of different organic loading rates on acid phase of food waste anaerobic stabilization. *Journal of Applied Sciences Research*, 9(1): 271-278, pp. 271-278.
2. Sodsai, P. and Rachdawong, P. 2012. The Current Situation on CO₂ Emissions from the Steel Industry in Thailand and Mitigation Options. *International Journal of Greenhouse Gas Control*, Vol. 6, pp. 48-55.
3. Nuengjamnong, C., Rachdawong, P., and Chalermchaikit, T. 2010. Effect of Amoxicillin on Biogas Production and the *Eschericia coli* Population in Biogas Systems Treating Swine Wastewater. *The Thai Journal of Veterinary Medicine*, Vol. 40, No. 1, pp. 57-62.
4. Wangkiat, A., Harvey, N. W., Okamoto, S., Wangwongwatana, S., and Rachdawong, P. 2004. Characterization for Some Emission Sources in CMB Calculation for Mae Moh Area, Thailand. *International Journal of Environment and Pollution*, Vol. 21, No. 3, pp. 223-239.
5. Christensen, E. R., Rachdawong, P., Karls, J. F, and Van Camp, R. P. 1999. PAHs in Sediments: Unmixing and CMB Modeling of Sources. *Journal of Environmental Engineering Division, American Society of Civil Engineers*, Vol. 125(11), Page. 1022-1032.
6. Rachdawong, P. Christensen, E. R., and Karls, J. F. 1998. Historical Fluxes to Lake Michigan Sediments Determined by Factor Analysis. *Water Research*, Vol. 32(8), Page 2422-2430
7. Rachdawong, P., Christensen, E. R., and S. Chi. 1998. Source Identification of PCBs in Sediments from the Milwaukee Harbor Estuary. *Water Science & Technology*, Vol. 37(6-7), Page 199-206.

8. Rachdawong, P. and Christensen, E. R. 1997 Determination of PCB Sources by A Principal Component Analysis. *Environmental Science & Technology*, Vol. 31, Page 2686-2691.
9. Christensen, E. R., Li, A., Ab Razak, I. A. Rachdawong, P. and Karl, J. F. 1997. Sources of Polycyclic Aromatic Hydrocarbons in Sediments of the Kinnickinnic River, Wisconsin. *Journal of Great Lakes Research*, Vol. 23, Page 61-73.
10. Rachdawong, P. and Christensen, E. R. 1996. PAH Source Identification: An Application of Factor Scores. Presented at the International Association for Great Lakes Research (IAGLR) 39th Conference, University of Toronto, Ontario, Canada, May 30, 1996. Book of Abstracts, p. 111.
11. Pohland, F. G. and Rachdawong, P. 1996. Use of Post-Consumer Carpet Products During Landfill Management of Solid Wastes. *Water Science & Technology*, Vol. 34(7-8), Page 429-436.

INTERNATIONAL CONFERENCES

1. Rachdawong, P. (2006). "Fates of Nickel and Zinc During Degradation of Solid Waste in Thailand", Intercontinental Landfill Research Symposium # 4, Sweden, 12-14 June 2006, pp.92-95.
2. Osathapan, K. and Rachdawong, P. (2006). "Removal of Cyanide and Zinc by Ion Exchange Process", The 12th Korea- Thailand conference on Environmental Engineering, Korea, 19-21 April 2006.
3. Osathapan, K. and Rachdawong, P. (2005). "Effect of EDTA on Oxidation of Cyanide Using Electrochemical and Photocatalytic Processes", Proceeding of International Conference of Hazardous Waste Management for a Sustainable a Future, Thailand, January 10-12, 2005.
4. Osathapan, K. and Rachdawong, P. (2005). "Effect of Zinc on Cyanide Removal by Fe (VI) Oxidation", Proceeding of International Conference of Hazardous Waste Management for a Sustainable a Future, Thailand, January 10-12, 2005.
5. Wangkiat, A., Harvey, N. W., Okamoto, S., Wangwongwatana, S., and Rachdawong, P. (2004). "Source Apportionment of PM10 in Mae Moh Area, Thailand", Proceedings of the 4th International Conference on Urban Air Quality: Measurement, Modelling, and Management, Charles University, Prague, Czech Republic, March 25-27, 2004, pp. 310-313.
6. Wangkiat, A., Harvey, N. W., Okamoto, S., Wangwongwatana, S., and Rachdawong, P. (2003). "Characterisation of PM10 Composition from Biomass Burning Emissions in Mae Moh Area, Thailand", Proceedings of the 2nd Regional Conference on Energy Technology Towards a Clean Environment, Phuket, Thailand, February 12-14, 2003, pp. 691-697.
7. Sisomphon, K., Hongvinitkul, S., Nimityongskul, P., Tangtemsirikul, S., and Rachdawong, P. (1999). "Uses of Municipal Solid Waste Ahs as Construction Materials", Proceedings of the Seven East Asia-Pacific Conference on Structural Engineering and Construction, Kochi University, Kochi, Japan, August 27-29, 1999, Vol. 2, pp. 1366-1371.

NATIONAL PUBLICATIONS

1. Rachdawong, P. and Apawootichai, S. 2003. Development of Criterion Weights for Preliminary Site Selection: A Pilot Project of Suphanburi Industrial Estate. *Songkhlanakarin Journal of Science and Technology*, Vol. 25, no. 6, pp.773-781.
2. Rachdawong, P. and Apawootichai, S. 2002. An Environmental Framework for Preliminary Industrial Estate Site Selection using a Geographical Information System. *Asian Journal of Energy and Environment*, Vol. 3, Issues 3-4, pp. 119-138.
3. Rachdawong, P. and Rattanathanangpong, C. 2002. Analysis of PM-10 Time Trends at Dindaeng Air Monitoring Station. *Journal of Environmental Research Institute of Chulalongkorn University*, Vol. 24, no. 1, pp.25-30.

4. Rachdawong, P., Rattanathanangpong, C., and Narupiti, S. 2001. Investigation of Major Air Pollution Sources in Bangkok by Factor Analysis. *Journal of Environmental Research Institute of Chulalongkorn University*, Vol. 23, no. 2, pp.35-43.
5. Sangiampaisalsuk, N., Nuchprayoon, A., Srimongkol, C., and Rachdawong, P. 2001. Classification and Exchange of Waste Materials in Thailand: Current and Possible Future Courses. *Journal of Environmental Research Institute of Chulalongkorn University*, Vol. 22, No. 2, pp.64-75.
6. Sangiampaisalsuk, N., Rachdawong, P., and Khaodhiar, S. Analysis of Solid Wastes Generation Rates Characteristics for Bangkok, Thailand. 2000. *Journal of Environmental Research Institute of Chulalongkorn University*, Vol. 22, No. 1, pp.80-92
7. Tangtamsirikul, S, Rachdawong, P, and Sisomphon, K. 2000. Municipal Solid Waste Ash as a Cement Raw Material Substitute. *Songkhlanakarin Journal of Science and Technology*, Vol. 22, no. 3, pp.339-345.

PUBLICATIONS

1. Solid Waste Open Dump Fire: Next Step to Walk. , <http://www.chula.ac.th/th/archive/7066>, 1/4/2014

GUIDES

1. Site remediation, A guide for environmental engineering exam, Council of Engineers, Thailand, 2014.
2. Water and land resource development, A guide for environmental engineering exam, Council of Engineers, Thailand, 2014.

AFFILIATIONS

1. Royal Thai Institute of Engineers (committee member and assistant secretary to environmental engineering division 2000-2002)
2. Examination committee for licensing (Council of Engineers, 2009-current)

EXPERTISES

1. Integrated management of solid and hazardous waste from household and industries
2. Anaerobic treatment for biogas production from waste materials and wastewater
3. Greenhouse gas inventory and strategies