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1. Educational Background

- Year 2009 Ph.D. (Environmental Technology), King Mongkut's University of Technology Thonburi, Thailand
(ปร.ด. (เทคโนโลยีสิ่งแวดล้อม), มหาวิทยาลัยเทคโนโลยีพระจอมเกล้าธนบุรี, ประเทศไทย 2552)
- Year 2002 M.Eng. (Survey Engineering), Chulalongkorn University, Thailand
(วศ.ม. (วิศวกรรมสำรวจ), จุฬาลงกรณ์มหาวิทยาลัย, ประเทศไทย 2545)
- Year 1997 B.Eng. (Civil Engineering), Kasetsart University, Thailand
(วศ.บ. (วิศวกรรมโยธา), มหาวิทยาลัยเกษตรศาสตร์, ประเทศไทย 2540)

RESEARCH INTEREST

Municipal solid waste management, Waste and climate change, Disaster waste management, Landfill methane recovery and utilization, Landfill engineering

PUBLICATIONS

International journal

- Sutthasil N., Chiemchaisri C., Chiemchaisri W., Wangyao K., Towprayoon S., Endo K., Yamada M. (2014). "Comparison of Solid Waste Stabilization and Methane Emission from Anaerobic and Semi-Aerobic Landfills Operated in Tropical Condition". *Environ. Eng. Res.*, 19(3), pp. 261-268.
- Ishigaki T., Kawai K., Kubota R., Wangyao K., Lieu P.K., Yamada M., Towprayoon S., Chiemchaisri C. (2014). Flood-resilient Solid Waste Management in Vulnerable Asian Cities". 第25回廃棄物資源循環学会研究発表会, Japan
- Ishigaki T., Tajima R., Kawai K., Kubota R., Lieu, P.K., Yamada M., Wangyao K., Towprayoon S., Chiemchaisri C. (2015). "Capacity Development for Flood Waste Management in Vulnerable Asian Cities". 第26回廃棄物資源循環学会研究発表会, Japan
- Ochiai S., Ishigaki T., Wangyao K., Yamada M. (2015). "Measurement of the Potential Heat and Ash Content of the Residue from Mechanical Biological Treatment in Thailand". 第26回 廃棄物資源循環学会研究発表会, Japan
- Sutthasil, N., Chiemchaisri, C., Chiemchaisri, W., Wangyao, K., Endo, K., Ishigaki, T., Yamada, M. (2019). "The effectiveness of passive gas ventilation on methane emission reduction in a semi-aerobic test cell operated in the tropics". *Waste Management*, Volume 87, pp. 954-964 (I.F. = 5.431).
- Chungam, B., Vinitnantharat, S., Towprayoon, S., Suanburi, D., Buddhawong, S., and Wangyao, K., (2021). "Evaluation of the potential of refuse-derived fuel recovery in the open dump by resistivity survey prior to mining". *Journal of Material Cycles and Waste Management*, 23(4), pp. 1320-1330.

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- Chommontha, N., Phongphiphat, A., Wangyao, K., Patumsawad, S. and Towprayoon, S. (2022). “Effects of operating parameters on co-gasification of coconut petioles and refuse-derived fuel”. *Waste Management and Research*, 40(5) pp. 575-585.

National Conference

- Chandler, T., Drake, A., Brown, E., Julian, H., Simonsen, N., Ade, C., Wangyao, K., Kamens, R.M., Gheewala, S.H. (2014). “Comparative Life Cycle Assessment of Tropical Island Municipal Solid Waste Strategies”. *Journal of Sustainable Energy and Environment*, 5, pp. 75-84.

International Conference

- Yamada M., Ishigaki T., Endo K., Wangyao K., Chiemchaisri C., Sutthasil N., Towprayoon S. (2014) A Semi-Aerobic Test Cell Experiment under Tropical Climate Conditions. 1st 3R International Scientific Conference on Material Cycles and Waste Management
- Ochiai S., Ishigaki T., Komsilp Wangyao, Yamada M. (2014) Adaptability of Mechanical Biological Treatment in Tropical Asia: A case study in Thailand. The 25th Annual Conference of Japan Society of Material Cycle and Waste Management, Abstracts, 625-626
- Ishigaki T., Wangyao K., Yamaguchi N., Yamada M. (2014) Assessment of Management of Waste Landfills coupled with Leachate Treatment in South East Asia. 1st 3R International Scientific Conference on Material Cycles and Waste Management
- Sutthasil N., Chiemchaisri C., Chiemchaisri W., Wangyao K., Endo K., Ishigaki T., Yamada M. (2015) Methane Emission from Semi-aerobic Landfill Test Cell Operated in Tropical Climate: Case Study of Thailand, The 2nd 3R International Scientific Conference on Material Cycles and Waste Management, 21-23 May 2015, Daejeon, Republic of Korea
- Ishigaki T., Kawai K., Kubota R., Wangyao K., Lieu P.K., Towprayoon S., Chiemchaisri C., Yamada M. (2015) Management of Flood Waste in Small and Medium Scale Asian Cities in Tropical Region, The 2nd 3R International Scientific Conference on Material Cycles and Waste Management, 21-23 May 2015, Daejeon, Republic of Korea
- Payomthip, P., Wangyao, K., Chiemchaisri, C., Ishigaki, T., Lee, D. H., Towprayoon, S., 2016, Biodry of Municipal Solid Waste to Utilize as Solid Recovered Fuel, The 3rd 3R International Scientific Conference on Material Cycles and Waste Management (3RINCs) 2016, 9-10 March 2016, Hanoi, Vietnam.
- Payomthip, P., Wangyao, K., Lee, D. H., Towprayoon, S., 2016, Effect of inoculum on biodrying of municipal solid waste utilized as refuse derived fuel, Ninth Intercontinental Landfill Research Symposium (ICLRS 2016), June13-15, 2016, Hokkaido, Japan.
- Ishigaki T., Ochiai S., Yamada M., Lee D.H., Park J.R., Wangyao K., 2016, Applicability of MBT in middle scale and small scale municipality in Asia, The 9th Intercontinental Landfill Research Symposium, Japan

- Ochiai S., Ishigaki T., Wangyao K., Lornimitdee C., Yamada M., 2016, Analysis of temperature profile in an open air bio-drying process of MBT in Tropical Asia, 2016 Spring Conference of the Korea Society of Waste Management, Korea
- Wangyao, K. Sutthasi, N., Payomthip, P., Sutthiprapa, S., Chiemchaisri, C., Ishigaki, T., Ochiai S., 2016, Methane Emission from MBT Technology at Phitsanulok Landfill, The 3rd 3R International Scientific Conference on Material Cycles and Waste Management (3RINCs) 2016, 9-10 March 2016, Hanoi, Vietnam. (Excellent Research Award)
- Wangyao, K. Sutthasi, N., Payomthip, P., Sutthiprapa, S., Chiemchaisri, C., 2016 Preliminary Results of Methane Emission from Thin Layer Landfill, Ninth Intercontinental Landfill Research Symposium (ICLRS 2016), June13-15, 2016, Hokkaido, Japan.
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- Wangyao, K., Sutthasil, N., Payomthip, P., Sutthiprapa, P., Chiemchaisri, C., Towprayoon, S., 2017, Investigations of Methane Emission from 3 MBT Plants in Thailand, The 3rd Symposium of International Waste Working Group Asian Regional Branch (IWWGARB), 12-14 April 2017, Seoul, Korea
- Ishigaki T., Ochiai S., Wangyao K., Sutthasil N., Lee D.H., Yamada M., 2017, Mechanical-biological treatment for municipal waste in Asian regions, The 28th Annual Conference of Japan Society of Material Cycles and Waste Management, Japan
- Ishigaki T., Ochiai S., Wangyao K., Yamada M., Lee D.H., 2017, Applicability of Mechanical-biological Treatment for Municipal Waste in Middle and Small Scale Cities, The 3rd Symposium of International Waste Working Group Asian Regional Branch, Korea
- Ishigaki T., Ochiai S., Wangyao K., Yamada M., 2017, Localization of Mechanical Biological Treatment for Municipal Waste Management in Asia, The 4th 3R International Scientific Conference on Material Cycles and Waste Management, India
- Wangyao, K. Bhatsada, A, Wungsumpow, C., Ngamket, K., Laphitchayangkul, T., 2018, Evaluation of sUAS photogrammetry accuracy for landfill mapping, The 10th Asia-Pacific Landfill Symposium, 24-26 November 2018, Tokyo, Japan
- Wungsumpow, C., Towprayoon, S., Chiemchaisri, C., Suanburi, D., Wangyao, K., 2018, Application of resistivity measurement for assessing the plastic material in landfill, The 10th Asia-Pacific Landfill Symposium, 24-26 November 2018, Tokyo, Japan
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- Ishigaki, T., Sutthasil, N., Ochiai, S., Wangyao, K., Yamada, M., 2018, Feasibility of mechanical-biological treatment for mixed municipal waste in Southeast Asia, the 7th

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- Wungsumpow, C., Towprayoon, S., Chiemchaisri, C., Suanburi, D., Wangyao, K., 2019, Application of geophysics measurements for investigating the waste stabilization in windrow MBT, The 4th Symposium of International Waste Working Group Asian Regional Branch, 20-22 February 2019, Bangkok, Thailand