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1. Educational Background

Year A.D. 2011 Ph.D. (Environmental Technology), King Mongkut's University of Technology Thonburi, Thailand

(ปร.ค. (เทคโนโลยีสิ่งแวคล้อม), มหาวิทยาลัยเทคโนโลยีพระจอมเกล้าธนบุรี, ประเทศไทย, 2554)

Year A.D. 2004 M.Eng. (Transportation Engineering), King Mongkut's University of

Technology Thonburi, Thailand

(วศ.ม. (วิศวกรรมขนส่ง), มหาวิทยาลัยเทคโนโลยีพระจอมเกล้าธนบุรี, ประเทศไทย,

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Year A.D. 2001 B.Eng. (Civil Engineer), King Mongkut's University of Technology

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PROFESSIONAL APPOINTMENT

2013 – present

Researcher of the Joint Graduate School of Energy and Environment (JGSEE), King Mongkut's University of Technology Thonburi, Bangkok, Thailand.

RESEARCH INTEREST

Estimation of biomass open burning emissions and greenhouse gas emissions inventory

PUBLICATIONS

International Journal

- Chea, K., Manomaiphiboon, K., Aman, N., Thepa, S., Junpen, A. and Devkota, B. (2021) Ambient thermal comfort analysis for four major urban areas in Thailand, Cambodia, and Laos: Variability, trend, factor attribution, and large-scale climatic influence. *Science Asia*. 47(4): pp. 618-628. October 2021
- Junpen, A., Pansuk, J. and Garivait, S. (2020) Estimation of Reduced Air Emissions as a Result of the Implementation of the Measure to Reduce Burned Sugarcane in Thailand. *Atmosphere*. 11(4), 366; https://doi.org/10.3390/atmos11040366. Apr
- Cheewaphongphan, P., Junpen, A., Kamnoet, O. and Garivait, S. (2018) Study on the Potential of Rice Straws as a Supplementary Fuel in Very Small Power Plants in Thailand. *Energies*. 11(2), 270, https://doi.org/10.3390/en11020270.
- Junpen, A., Pansuk, J., Kamnoet, O., Cheewaphongphan, P. and Garivait, S. (2018) Emission of Air Pollutants from Rice Residue Open Burning in Thailand. *Atmosphere*. 9(11): 449, https://doi.org/10.3390/atmos9110449.
- Pansuk, J., Junpen, A. and Garivait, S. (2018) Assessment of Air Pollution from Household Solid Waste Open Burning in Thailand. Sustainability. 10(7), 2553; https://doi.org/10.3390/su10072553.

- Cheewaphongphan, P., Junpen, A., Garivait, S. and Chatani, S. (2017) Emission Inventory of On-Road Transport in Bangkok Metropolitan Region (BMR) Development during 2007 to 2015 Using the GAINS Model. *Atmosphere*, 8(9), 167; https://doi.org/10.3390/atmos8090167. September 2017
- Pham, T.B.T., Garivait, S. and Junpen, A. (2015) An Investigation of Atmospheric Mercury from Power Sectors in Thailand. *Atmosphere*. 6(4): pp. 490-502. April 2015
- Junpen, A., Garivait, S. and Bonnet, S. (2013) Estimating Emission from Forest Fires in Thailand using MODIS Active Fire Product and Country Specific Data. *Asia-Pacific Journal of Atmospheric Science*. 49(3): pp. 389-400. May 2013
- Junpen, S., Garivait, S. Bonnet, S. and Pongpullponsak, A. (2011) Estimation of Forest Fire Emission in Thailand by Using Remote Sensing Information. *World Academy of Science, Engineering and Technology I: Mathematical and Computational Sciences*. 58: pp. 735-743. Oct. 2011

International Conference

- Phuengyaem, P., Junpen, A., and Garivait, S. (2019) Estimation of health burden due to PM from on road transport in BMR in 2015 using environmental benefits mapping and analysis program. In the 7th International Conference on Air Benefit and Cost and Attainment Assessment. Hangzhou, China. May 20-22, 2019.
- Phuengyaem, P., Junpen, A., and Garivait, S. (2018) Relationships between on-road transport emissions and ambient particulate matter concentration in the Bangkok Metropolitan Region during 2007-2015. In 7th International Conference on Sustainable Energy and Environment (SEE2018). Bangkok, Thailand. 28-30 November.
- Kamnoet, O., Junpen, A., and Garivait, S. (2018) Improving the estimation of burned area from biomass open burning in the Greater Mekong Sub-Region using high resolution satellite products. In 7th International Conference on Sustainable Energy and Environment (SEE2018). Bangkok, Thailand. 28-30 November.
- Kajina, W., Junpen, A., Garivait, S., Kamnoet, O. and Rousset, P. (2018) Charcoal produced from mangrove in center Thailand. In 7th International Conference on Sustainable Energy and Environment (SEE2018). Bangkok, Thailand. 28-30 November.
- Khiewvongphachan, X., Junpen, A. and Garivait, S. (2015) Estimation of Carbon Stock Change from Forestland Conversion and Land Use Change into Forestland in Lao PDR During 1992 to 2012. in International Soil Conference (ISC2015). Phetchaburi, Thailand. 18-21 August 2015.
- Pham Thi Bich Thao, Agapol Junpen, Penwadee Cheewaphongphan, Thanonphat Boonman, Savitri Garivait, Satoru Chatani and Kazunori Kojima (2014) Updated Atmospheric Emissions Inventory of Gaseous and Particulate from Power Generation in Thailand using GAINS-Asia. in 5th International Conference on Sustaianable Energy and Environment (SEE2014). Bangkok, Thailand. November 19-21, 2014.
- Boonman, T., Junpen, A., Cheewaphongphan, P., Pham, T.B.T., Wattanakroek, S. and Garivait, S. (2014) An improved inventory of emissions from biomass open burning in Thailand. In *5th International Conference on Sustaianable Energy and Environment (SEE2014)*. Bangkok, Thailand. November 19-21, 2014.
- Junpen, A., Garivait, S., Bonnet, S. and Pongpullponsak, A. (2012) Surface fire spread prediction in mixed deciduous forest fuel in Thailand. In 4th International Conference on

- Sustainable Energy & Environment (SEE 2011): A Paradigm Shift to Low Carbon Society. Bangkok, Thailand. 27-29 February 2012.
- Junpen, A., Garivait, S., Bonnet, S. and Pongpullponsak, A. (2011) Estimating the PM10 emissions from forest fire in Thailand by using satellite information. In *2nd International Conference on Environmental Science and Technology (ICEST 2011)*. Singapore. 26-28 February 2011.
- Junpen, A., Garivait, S., Bonnet, S. and Pongpullponsak, A. (2011) Estimation of forest fire emission in Thailand by using remote sensing information. In *International Conference on Civil and Environmental Engineering (ICCEE 2011)*. Indonesia. 26-28 October 2011.
- Junpen, A., Garivait, S., Bonnet, S. and Pongpullponsak, A. (2010) Spatial and temporal variation of forest fire emission estimation by using remote sensing information. In *GMSTEC 2010: International Conference for a Sustainable Greater Mekong Subregion*. Bangkok, Thailand. 26-27 August 2010.
- Kanokkanjana, K., Chaiyo, U., Junpen, A., Cheewaphongphan, P. and Garivait, S. (2009) Carbonaceous aerosol emission from rice field open burning in Thailand. In *The 14th International Joint Seminar on the Regional Deposition Processes in the Atmosphere (RDPA 2008)*. Bangkok, Thailand. 7-9 April 2009.

National Journal

- Chankasem, P., Manomaiphiboon, K., Devkota, B., Hoang, T.T., Nantawong, N., Chotamonsak, C. and Junpen, A. (2022) Satellite precipitation characteristics and effects of land cover change in greater Bangkok. *Journal of Sustainable Energy & Environment*. 12(3): pp. 77-85.
- Phuengyaem, P., Garivait, S. and Junpen, A. (2021) Relationships between on-road transport emissions and particulate matter ambient concentration in the Bangkok Metropolitan region during 2007-2018. *Journal of Sustainable Energy & Environment*. 12(4): pp. 115-125
- Boonman, T., Garivait, S., Bonnet, S. and Junpen, A. (2014) An inventory of air pollutant emissions from biomass open burning in Thailand using MODIS burned area product (MCD45A1). *Journal of Sustainable Energy & Environment*. 5(3): pp. 85-94. Jul-Sep 2014