

ผศ.ดร.ธงชัย ขนาบแก้ว

Thongchai Kanabkaew, D.Eng.



Position: Assistant Professor

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Education

D.Eng. (Environmental Engineering and Management), Asian Institute of Technology, Thailand

M.Sc. (Environmental Technology), King Mongkut's University of Technology Thonburi, Thailand

B.Eng. (Civil Engineering), Prince of Songkla University, Thailand

Expertise

Applications of emission inventory, chemical transport model, satellite data, and IoT sensor for air quality management.

Books and chapters in books

Permadi, D.A., Kim Oanh, N.T., Kanabkaew, T. and Sothea, K. (2014). Emission inventory for air quality modeling, in Kim Oanh, N.T. (Editor). Improving air quality in Asian developing countries: compilation of research findings, NARENCA.

Shrestha, R.M., Kim Oanh, N.T., Shrestha, R. P., Rupakheti, M., Rajbhandari, S., Permadi, D.A., Kanabkaew, T. and Iyngararasan, M. (2013). Atmospheric brown cloud (ABC) emission inventory manual, United Nations Environment Programme, Nairobi, Kenya.

Engel-Cox, J.A., Huff, A.L., Kanabkaew, T. and Kim Oanh, N.T. (2012). Satellite tools for air quality management with focus on particulate matter, in Kim Oanh, N.T. (Editor). Integrated air quality management: Asian case studies, CRC press.

Kim Oanh, N.T., Permadi, D.A., Bao-Ning, Z., Quang Huy, T.N., Phuong, N.L. Kanabkaew, T. and Iqbal, A. (2012). Applications of photochemical smog models for assessment of ozone, particulate matter air quality, and acid deposition in Asian cities, in Kim Oanh, N.T. (Editor). Integrated air quality management: Asian case studies, CRC press.

Publications

Kanabkaew, T., Mekbungwan P., Raksakietisak S. and Kanchanasut K. (2019). Detection of PM_{2.5} plume movement from IoT ground level monitoring data. Environmental Pollution, 252,543-552.

Koomsang, R., Chuchue, S. and Kanabkaew, T. (2015). Applications of atmospheric dispersion model for air quality assessment of NO_x and SO₂ from waste incinerator. Environment and Natural Resources Journal, 13(1), 21-27.

Kanabkaew, T. (2015). 3D photochemical dispersion models for secondary air pollutant study: from input data preparation to model performance evaluation. KKU Research Journal, 20(2), 198-214.

Kanabkaew, T., Rakmak, N. and Choosaeng, S. (2014) Assessment of hydrogen sulfide dispersion from dumpsite using AERMOD modeling system. Advanced Materials Research, 931-932, 650-654.

Kanabkaew, T. (2013). Prediction of hourly particulate matter concentrations in Chiangmai, Thailand using MODIS aerosol optical depth and ground-based meteorological data. EnvironmentAsia, 6(2), 65-70.

Kanabkaew, T., Nookongbut, P. and Soodjai, P. (2013). Preliminary assessment of particulate matter air quality associated with traffic emissions in Nakhon Si Thammarat, Thailand. Procedia Engineering, 53, 179-184.

Kanabkaew, T. and Kim Oanh, N.T. (2011). Development of spatial and temporal emission inventory for crop residue field burning. Environmental Modeling and Assessment, 16(5), 453-464.

Selected proceedings

Thanutchangsang, B., Rattanarat, J. and Kanabkaew, T. (2018). Change of forest area and its associated CO₂ emissions at provincial level in southern part of Thailand. The 3rd Environment and Natural Resources International Conference (ENRIC2018), Chonburi, Thailand.

Yimlamaid, A., Suranowarath, K., Kanabkaew, T., and Lalitaporn, P. (2018). Long-term assessment of daily atmospheric nitrogen dioxide in Thailand using satellite observed data. The 2nd International Conference on Environment, Livelihood, and Services (ICELS 2018), Bangkok, Thailand.

- Mekaumnuaichai, T., Suranowarath, K., Kanabkaew, T. and Lalitaporn, P. (2018). Observations of Atmospheric Carbon Monoxide and Formaldehyde in Thailand Using Satellites. The 2nd International Conference on Environment, Livelihood, and Services (ICELS 2018), Bangkok, Thailand.
- Kanabkaew, T. and Buasing, K. (2015). Assessment of air pollution concentrations from brick kilns using atmospheric dispersion model. Air Pollution 2015, Valencia, Spain.
- Kanabkaew, T. and Kongkul, K. (2014). Concentrations of particulate matters during semester and semester break at Nakhon Si Thammarat municipality, Southern Thailand. The 2nd International Conference on Environmental Science and Technology (ICOEST2014), Antalya, Turkey.
- Kanabkaew, T., Rattanarat, J. and Petcharoen, S. (2014). Development of a GIS-based forest fire risk map: case of Kuan Kreng swamp forest, Southern Thailand. The 5th International Conference on Sustainable Energy and Environment (SEE 2014), Bangkok, Thailand.