ASSOCIATE PROFESSOR

DARANEE JAREEMIT, PH.D.

รองศาสตราจารย์ ดร. ดารณี จารีมิตร

Architecture and Planning
Thammasat University, Rangsit Campus
Pathumthani 12120

jdaranee@gmail.com

EXPERTISE

- Building Energy Consumption
- Ventilation and Air Quality
- Urban Microclimate

EDUCATION

ค.ศ. 2014 | **Ph.D.**

Architectural Engineering, The Pennsylvania State University, USA

ค.ศ. 2005 | **M.Arch.**

Architecture, Thammasat University, Thailand

ค.ศ. 2003 | **B.Sc.**

Architecture (2nd Class Honours), Thammasat University, Thailand

PUBLICATIONS: INTERNATIONAL JOURNAL ARTICLES

- An, F., Liu, J., Lu, W., & Jareemit, D. (2021). A Review of The Effect of Traffic-Related Air Pollution Around Schools on Student Health and Its Mitigation. *Journal of Transport & Health*, 23, 101249. https://doi.org/10.1016/j.jth.2021.101249.

- Lohwanitchai, K. & Jareemit, D. (2021). Modeling Energy Efficiency Performance and Cost-Benefit Analysis Achieving Net-Zero Energy Building Design: Case Studies of Three Representative Offices in Thailand. *Sustainability*, 13(9), 5201. https://doi.org/10.3390/su13095201.

- Inprom, N., & Jareemit, D. (2021). Efficient Envelope Designs to Maximize Residential Cooling Energy Savings in Bangkok Neighborhoods. *Nakhara: Journal of Environmental Design and Planning*, 20, Article 103. Retrieved from https://ph01.tci-thaijo.org/index.php/nakhara/article/view/239912

PUBLICATIONS: INTERNATIONAL JOURNAL ARTICLES (CONT.)

- Jareemit, D., & Canyookt, P. (2021). Residential Cluster Design and Potential Improvement for Maximum Energy Performance and Outdoor Thermal Comfort on A Hot Summer in Thailand. *International Journal of Low-Carbon Technologies*, 16(2), 592–603. https://doi.org/10.1093/ijlct/ctaa091

- Srivanit, M., & Jareemit, D. (2020). Modeling The Influences of Layouts of Residential Townhouses and Tree-Planting Patterns on Outdoor Thermal Comfort in Bangkok Suburb. *Journal of Building Engineering*, 101262. https://doi.org/10.1016/j.jobe.2020.101262

- Jareemit, D. & Limmeechokchai, B. (2019). Impact of Homeowner's Behaviours on Residential Energy Consumption in Bangkok, Thailand. *Journal of Building Engineering*, 21, 328-335.

- Jareemit, D. & Srebric, J. (2015). A Characterization of Time-Dependent Air Infiltration Rates in Retail Stores Using Calibrated Multi-Zone Model. *Science and Technology for the Built Environment*, 21(4), 420-428.

- Zaatari, M., Nirlo, E., Jareemit, D., Crain, N., Srebric, J., & Siegel, J. (2014). Ventilation and Indoor Air Quality in Retail Stores: A Critical Review (RP 1596). *HVAC and R Research*, 20(2), 276-294. https://doi:10.1080/10789669.2013.869126

PUBLICATIONS: NATIONAL JOURNAL ARTICLES

- Inprom, N., & Jareemit, D. (2021). Efficient Envelope Designs to Maximize Residential Cooling Energy Savings in Bangkok Neighborhoods. *Nakhara: Journal of Environmental Design and Planning*, 20, Article 103. Retrieved from https://ph01.tci-thaijo.org/index.php/nakhara/article/view/239912

- Sukseeda, J. & Jareemit, D. (2019). Guideline for Investment in Building Enclosure Retrofit to Improve Home Energy Efficiency Based on Thailand Energy and Environmental Assessment Method. *Journal of Architectural/ Planning Research and Studies*, 16(1), 69-81.

- Jareemit, D. (2018). Numerical Simulation of Moisture Transfer Behaviors in Residential Walls in Hot and Humid Region. *Journal of Architectural/ Planning Research and Studies*, 15(2), 153-172.

- Jareemit, D., Julpanwattana, P. & Choruengwiwat, J. (2017). Impact of Outdoor Air Exchange Rates on Sleep Quality and The Next-Day Performance With Application of Energy Recovery Ventilator. *Journal of Architectural/ Planning Research and Studies*, 14 (1), 21-32.

PUBLICATIONS: NATIONAL JOURNAL ARTICLES (CONT.)

- Jareemit, D. (2015). A Calculation of Air Exchange Rate for Modern Thai Houses. *Journal of Architectural/ Planning Research and Studies*, 12(2), 39-51.
- Jareemit, D. & Inprom, N. (2015). Significant Parameters in Building Energy Simulation: A Review. *Journal of Architectural/ Planning Research and Studies*, 12(1), 1-14.
- Jareemit, D., Shu, S. & Srebric, J. (2014). A Field Investigation of Air Infiltration Rates Through Automatic Entrance Doors in Retail Buildings. *BUILT Journal*, 4, 51-59.
- Jareemit, D. & Shu, S. (2014). An Investigation of The Impact Of Building Entrance Vestibule on Indoor Humidity Using A Calibrated Multi-Zone Model. *BUILT Journal*, 3, 23-31.
- จิฐิพร วงศ์วัชรไพบูลย์, อรรจน์ เศรษฐบุตร, เฉลิมวัฒน์ ตันตสวัสดิ์, ดารณี จารีมิตร และ สุดาภรณ์ ฉุ้งลู้. (2552). ศักยภาพการระบายอากาศของปล่องแสงอาทิตย์ในประเทศไทย. *วารสารวิจัยพลังงาน*, ปีที่ 6 ฉบับที่ 2552/1, 92-105.
- Jareemit, D., Sreshthaputra, A., Yimprayoon, C. & Tantasavasdi, C. (2006). Respiratory Diseases: The Fatal Risk Caused by Inappropriate Design & Operation of Office Buildings (in Thai). *Journal of Architectural Research and Studies (JARS)*, 4(2), 1-19.
- Tantasavasdi, C. & Jareemit, D. (2005). Natural Ventilation: Planning Design Guidelines for Residential High-Rises (in Thai). *Journal of Architectural Research and Studies (JARS)*, 3, 21-36.

PUBLICATIONS: CONFERENCE PROCEEDINGS

- Supudomkul, B., Jareemit, D., Khanchaitit, P. & Janjamlha, T. (2020). A Readiness of Areas and Space Planning in Houses Supporting Emergency Services for Fall Injuries in The Elderly, *IOP Conference Series: Materials Science and Engineering*, 910(1): 012017.
- Lohwanitchai, K. & Jareemit, D. (2020). Analysis in Integrated Design Potentials Achieving Nearly Zero Energy in Office Buildings in Bangkok Neighbourhood. *IOP Conference Series: Materials Science and Engineering*, 910(1): 012016.
- Srivanit, M., & Jareemit, D. (2020). A comparison of diurnal variation of pavement albedo between vertical and horizontal surfaces under tropical climatic condition of Thailand. *IOP Conference Series: Materials Science and Engineering*, 910(1): 012011.

PUBLICATIONS: CONFERENCE PROCEEDINGS (CONT.)

- Jareemit, D. & Srivanit, M. (2020). Sensitivity Analysis of Designs of Row House Planning Influencing on Local Microclimate and Building's Cooling Energy Consumption in A Tropical City. *IOP Conference Series: Materials Science and Engineering*, 910(1): 012022.

- Jareemit, D. & Srivanit, M. (2019). Effect of Street Canyon Configurations and Orientations on Urban Wind Velocity in Bangkok Suburb Areas. *IOP Conference Series: Materials Science and Engineering*, 690: 012006. https://doi.org/10.1088/1757-899X/690/1/012006

- Jareemit D. & Inprom, N. (2019). A Time-Efficient Energy Forecasting Model for Cooling Load Consumption in Thai Houses. In *Proceeding of 1st International Congress on Recent Advances in Sciences and Technology*. February 20-22, Koala Lumpur, Malaysia.

- Srivanit, M. & Jareemit, D. (2019). Modelling The Urban Microclimate Effects of Street Configurations on Thermal Environment in The Residential Townhouse of Bangkok. In *Proceeding of 1st International Congress on Recent Advances in Sciences and Technology*. February 20-22, Koala Lumpur, Malaysia.

- Jareemit, D. (2017). A Study on Relationship Among Resident's Energy Saving Habits and Electricity Bills in Thai Households. In *Proceeding of Behavior, Energy & Climate Change Conference 2017 (BECC 2017)*. October 15-18. USA.

- Julpanwattana, P., Jareemit, D. & Choruengwiwat, J. (2017). Impact of Energy Recovery Ventilation on The Ventilation and CO_2 Concentration in One Bedroom Condominium in Thailand. In *Proceeding of World Sustainable Built Environment Conference 2017*. June 4-7. Hong Kong.

- Jareemit, D. & Limmeechokchai, B. (2017). Understanding Resident's Perception of Energy Saving Habits in Households in Bangkok. *Energy Procedia*, 138: 247-252.

- Jareemit, D. & Limmeechokchai, B. (2017). Influence of Changing Behavior and High Efficient Appliances on Household Energy Consumption in Thailand. *Energy Procedia* ,138: 241-246.

- Srivanit, M. & Jareemit, D. (2016). Human Thermal Perception and Outdoor Thermal Comfort Under Shaded Conditions in Summer: A Field Study in An Institutional Campus. In *Proceeding of 6th International Conference on Sustainable Energy and Environment*. Bangkok, Thailand.

- Jareemit, D., Inprom, N. & Sukseeda, J. (2016). Uncertainty Distributions in Architectural Design Parameters for Detached Houses Located in Bangkok Neighborhoods. In *Proceeding of ASHRAE and IBPSA-USA SimBuild 2016 Building Performance Modeling Conference*, Salt Lake City, Utah, USA.

PUBLICATIONS: CONFERENCE PROCEEDINGS (CONT.)

- Inprom, N. & Jareemit, D. (2016). Sensitivity Index of Building Envelope on Energy Consumption for Space Cooling in Thai Detached Houses. In *Proceeding of 7th Built Environment Research Associates Conference: BERAC7* (pp. 107-114). Pathum Thani, Thailand.

- Sukseeda, J. & Jareemit, D. (2016). A Relationship Analysis Between Energy Performance and Achieving Home Energy Rating System of Detached House. In *Proceeding of 7th Built Environment Research Associates Conference: BERAC7* (pp. 157-164). Pathum thani, Thailand.

- Jareemit, D., Shu, S., Howard-Reed, C., Alhafi, Z. & Srebric, J. (2014). Investigation of Air Exchange and Occupancy Rates in Big-Box Retail Buildings. *Indoor Air 2014 -13th International Conference on Indoor Air Quality and Climate*, pp. 219-226.

- Liu, J., Heidarinejad, M., Gracik, S., Jareemit, D. & Srebric, J. (2014). The Impact of Surface Convective Heat Transfer Coefficients on The Simulated Building Energy Consumption and Surface Temperatures. *Indoor Air 2014 -13th International Conference on Indoor Air Quality and Climate*, pp. 256-264.

- Jareemit, D., Shu, S. Heidarinejad, M., Kim, Y.S., Liu, J., Alhafi, Z. & Srebric, J. (2013). Evaluation of Indoor Mold Growth Relative to Indoor Humidity Using A Multi-Zone Modeling. *Proceeding of the CLIMA 2013*, Prague, Czech Republic.

- Jareemit, D., Sreshthaputra, A., Tantasavasdi, C. & Yimprayoon, C. (2006). Office Building Design Guidelines for Preventing Airborne Diseases. *The 8th Symposium on Graduate Research*, Khon Kaen University, Thailand. (Poster presented)

- Tantasavasdi, C. & Jareemit, D. (2006). Guidelines for evaluation and design of natural ventilation for houses.