

PROFESSOR ATCH SRESHTHAPUTRA, PH.D., DGNB  
FACULTY OF ARCHITECTURE  
CHULALONGKORN UNIVERSITY

EDUCATION

- Certified DGNB Consultant. German Sustainable Building Council (DGNB).
- Doctor of Philosophy (2003). Texas A&M University, USA (*Dissertation Topic: Building Design and Operation for Improving Thermal Comfort in Naturally Ventilated Buildings in a Hot-Humid Climate*).
- Certificate in Facility Management (2003). Texas A&M University, USA.
- Master of Science (1996). Georgia Institute of Technology, USA (*Research Topic: Technological Assessment of Building-integrated Photovoltaics*).
- Bachelor of Architecture (1993). Chulalongkorn University, Thailand.

KEY QUALIFICATIONS

- Green building design & construction (LEED, DGNB, Green Mark, and TREES)
- Design of low-energy buildings in tropical climates using active and passive design approaches.
- Building energy simulation using computer programs (i.e., EnergyPlus, VisualDOE 4.0, Design Builder). Calibration of simulation output and measurements.
- Simulation of airflow in and around buildings using Computational Fluid Dynamics (CFD).
- Facility energy management in commercial buildings. Building energy audits using walkthroughs, metering, and analysis of utility bills. Parametric analysis of conservation measures, saving calculations, payback period, and life-cycle cost calculation.

EXPERIENCE

- Head of the Department of Architecture, Chulalongkorn University. (Present).
- Professor. Department of Architecture, Chulalongkorn University. (Present).
- Vice President: Thai Green Building Institute (TGBI) (Present).
- Managing Director, Green Building Specialist. Africus Co., Ltd.
- Managing Director, Green Building Specialist. EGS-plan (Bangkok) Co., Ltd.
- Founder and Vice President: Thai Green Building Institute (TGBI).
- Vice President: The Association of Siamese Architects (2006-2008, 2011-2014).
- Columnist "Building Management", Energy Saving Magazine (Present).
- Columnist "Living Green", Bangkok Post Newspaper (2007 – 2012).
- Chairman of Green Building Committee: The Association of Siamese Architects (2006-2014).
- Committee: The Energy Promotion & Policy Office (EPPO). Ministry of Energy. (2006-2009).
- Research Assistant. Energy Systems Laboratory. Texas A&M University (1998 - 2002).
- Teaching Assistant. Dept. of Architecture. Texas A&M University (1998 – 2002).
- Visiting Instructor. Dept. of Architecture. Chulalongkorn University (1997).
- Licensed Architect. Terra Co, Ltd. Bangkok, Thailand (1993 – 1995).

AWARDS

- Distinguished Researcher of the Year 2019. The National Research Council of Thailand.

- Distinguished Professor of the Year 2020. Chulalongkorn University. Thailand.
- Excellent Research: The National Research Council. (Research Topic: Development of Ecovillage Green Housing Rating System for the National Housing Authority Project).
- First Prize. Low-energy house design competition. The Energy Promotion & Policy Office (EPPO). Ministry of Energy (2006).
- Excellent Doctoral Dissertation: The National Research Council. (Dissertation Topic: Building Design and Operation for Improving Thermal Comfort in Naturally Ventilated Buildings in a Hot-Humid Climate).
- Distinguished Professor. Faculty of Architecture, Chulalongkorn University (2005).
- King Medal for Excellence in Architectural and Environmental Design Research. Architectural Research Centers Consortium (ARCC) USA. (2004).
- Distinguished Alumni. Faculty of Architecture, Chulalongkorn University (2009).
- Research Grant: Radjadapisek Sompoj Research Fund (Topic: *Field Study of Thermal Comfort Preferences of Thai People in Buddhist Temples in Bangkok*).
- ASHRAE Grant-in-Aid: The American Society of Heating, Refrigerating, and Air-Conditioning Engineers (Topic: *Improvement of Thermal & Airflow Conditions in a Thai Buddhist Temple Using Coupled DOE-2/CFD*) (1999).
- ASHRAE Scholarship: The Houston Chapter of ASHRAE (1999 – 2002).
- Research Fellowship: Dept. of Architecture, Texas A&M University (2002).
- CARC Research Grant: College of Architecture, Texas A&M University (Topic: *Survey of Thermal and Airflow Condition in the Thai Buddhist Temples in Bangkok, Thailand*) (1999).
- The Royal Thai Government Scholarship (1995 – 2003).
- Scholarship: Chulalongkorn University (1990).
- Bronze Medal – Male Fencing: The 13<sup>th</sup> Thailand University Games (1999).

#### PROFESSIONAL REFERENCES

- Juror: Energy Saving House Design Competition. Ministry of Energy (2014 - Present)
- Juror: Ecovillage design competition. National Housing Authority (NHA) (2013).
- Juror: Low-carbon housing design competition. Thai Greenhouse Gas Organization (TGO) (2011).
- Juror: Emerson Cup for Energy Efficient Building (2009).
- Juror: Gold medal award for distinguished architecture (Green Building Category). The Association of Siamese Architects (ASA) (2008).
- Juror: Thailand Energy Award for Energy-Conscious Buildings. The Ministry of Energy (2007- present).
- Juror: Design competition for low-energy housing. The Ministry of Energy (2007).
- Juror: Gold medal award for distinguished architecture. The Association of Siamese Architects (ASA) (2006).
- Juror: Design competition of passive architecture. The Energy Generation Authority of Thailand (2005).
- Juror: Design competition of low-energy townhouses. The Energy Promotion & Policy Office (EPPO). The Ministry of Energy, Thailand (2005).

#### GREEN BUILDING CONSULTING WORK REFERENCES

- Park Ventures Ecoplex (LEED CS Platinum awarded). ASEAN Energy Award.
- Energy Complex (LEED CS Platinum awarded). ASEAN Energy Award.
- Thai Stock Exchange Headquarters (LEED CS Gold awarded). Thailand Energy Award.
- Pearl Bangkok (LEED CS Gold awarded)

- FYI Center (LEED CS Gold awarded)
- KBANK Headquarters Chaengwattana (LEED NC Gold awarded). ASEAN Energy Award.
- Thai Health Promotion Office (LEED NC Platinum Awarded). Thailand Energy Award.
- HSBC Green Library (LEED NC Platinum, Awarded)
- Precise System Headquarters (LEED NC Silver Awarded)
- Pandora Manufacturing Plant, Lumpoon (LEED NC Gold Awarded)
- AIA Capital Center (LEED EBOM Gold Awarded)
- Provincial Electricity Authority. Pathumthani Office (LEED EBOM Gold Awarded)
- Provincial Electricity Authority. Nakornprathom Office (LEED EBOM Silver Awarded)
- Provincial Electricity Authority. Chonburi Office (LEED EBOM Silver Awarded)
- Provincial Electricity Authority. Nong Ya Sai Office (LEED EBOM Gold Awarded).
- AIA Sathorn Tower (LEED EBOM Platinum Awarded in January 2020).
- Thai Stock Exchange Market Headquarters (LEED EBOM Platinum Awarded in December 2019).
- Samyan Mitrtown Office (LEED CS Gold awarded August 2020).
- Aira One (Spring Tower) (LEED CS Gold awarded September 2020).
- Bangkok Hospital, Chiangrai (LEED NC Healthcare Gold Awarded in 2020)
- HINO Suvamabhum Monozukuri Center (LEED NC Certified, Awarded July 2021). LEED Version 4
- 66 Tower (LEED CS Gold Awarded October 2021)
- Thai Health Promotion Office (LEED EBOM Gold, Awarded March 2022)
- Bangkok International Hospital Pheonix (LEED HC Gold, Awarded April 2022)
- ANIL Sathorn 12 Condominium (1<sup>st</sup> WELL Gold in Thailand, Awarded September 2022).
- The PARQ - 1st LEED CS & WELL CS Gold in Thailand, (LEED Awarded in 2021, WELL Awarded in 2023).
- Queen Sirikit National Convention Center (LEED NC Silver, February 2023).
- S-OASIS Tower (LEED CS Gold Awarded August 2023).
- O-NES Tower (LEED CS Gold Awarded August 2023).
- Samitivej Chonburi Hospital-Building B (LEED HC Gold Awarded August 2023).
- Park Silom Office Tower (LEED CS Gold Awarded SEP 2023).
- AIA East Gateway (LEED CS Gold Awarded OCT 2023).
- Silom Edge (Fitwel 1 Star Awarded Dec 2023).
- One Bangkok (LEED ND Platinum Awarded Feb 2024).
- Thai Life Head Office Building 1 (LEED EBOM Version 4.1 Awarded May 2024).
- Thai Life Head Office Building 1/1 (LEED EBOM Version 4.1 Awarded May 2024).
- One Bangkok (LEED-ND, LEED-CS, WELL-CS, TREES-CS Platinum anticipated in 2020).
- Central Embassy 2 (LEED CS Gold anticipated in 2023). [LEED Version 4](#)
- Central Dusit Thani Complex (LEED CS Gold anticipated in 2023). [LEED Version 4](#)
- MEA Headquarters Klongtoey (TREES, Gold anticipated in 2019)
- CP Medical Center (LEED NC Healthcare, Gold anticipated in 2023) [LEED Version 4](#)
- Bangkok Hospital, Chaingrai (LEED NC Healthcare, Gold anticipated in 2019)
- Smithivej Hospital, Chonburi (LEED NC Healthcare, Gold anticipated in 2020) [LEED Version 4](#)
- Ichitan Office Tower (TREES CS Gold anticipated in 2019).

#### WELL PROJECT REFERENCES

- One Bangkok – Office and Condominium Towers (WELL Platinum Anticipated)

- The PARQ (WELL Gold Pre-certified in 2019).
- ANIL Sathorn 12 Condominium (WELL Gold Pre-certified June 2019).
- Park Silom Office (WELL Gold Anticipated)
- Dusit Central Complex (WELL Gold Anticipated)
- AIA Bangna Office (WELL Gold Anticipated)
- O-NES Office Tower (WELL Gold Anticipated)
- Central Embassy 2 Office Tower (WELL Gold Anticipated)

#### Selected PUBLICATIONS

1. **Atch Sreshthaputra** (2015). Low-Carbon House and Building Manual. Thai Greenhouse Gas Management Organization (TGO). ISBN: 978-616-321-958-9
2. Nattawich Shugiattanakit & **Atch Sreshthaputra** (2019). Feasibility Study of High-rise Office Building Renovation to Comply with LEED O+M 4.1. Case Study: Sun Tower. Proceeding of the BETAC Conference. Faculty of Architecture, Khonkaen University. July 2019.
3. Suparat Pilangam & **Atch Sreshthaputra** (2018). Water Usage Prediction Model for Hotel in Bangkok. Proceeding of the BETAC Conference. Faculty of Architecture, Khonkaen University. June 2018.
4. Surachart Yawirach & **Atch Sreshthaputra** (2018). Greenhouse Gas Emission of University Buildings: Case Study Architecture Building. Chulalongkorn University. Proceeding of the BETAC Conference. Faculty of Architecture, Khonkaen University. June 2018.
5. Thanyathorn Khumpairoch & **Atch Sreshthaputra** (2018). Computer Tool on BIM to Facilitate the Assessment of Life-cycle Greenhouse Gas Emission from the Early Design Phase: Case Study Residential Building in Thailand. Proceeding of the BETAC Conference. Faculty of Architecture, Khonkaen University. June 2018.
6. Nutvipa Roongruangthanapol & **Atch Sreshthaputra** (2017). Greenhouse Gas Emission of Prototypical Houses of the National Housing Authority Thailand. Proceeding of the BETAC Conference. Faculty of Architecture, Khonkaen University. July 2017
7. **Atch Sreshthaputra** (2016). Final Report: Promotional activities of passive design in residential buildings in Thailand, Vietnam, India, Sri Lanka, and Reunion Island. 'Agence de l'environnement et de la maîtrise de l'énergie (ADEME). Paris.
8. **Atch Sreshthaputra** (2012). Greenhouse Gas Emission Index of Buildings in Thailand. Architecture Journal. Chulalongkorn University.
9. **Atch Sreshthaputra** (2011). Development of Carbon Emission Index for Buildings in Thailand Using Computer Program to Assess the Life-cycle. Final Report. Chulalongkorn University Research Fund.
10. **Atch Sreshthaputra** (2014). Low-carbon House and Building. Final Report. Thai Greenhouse Gas Management Organization (TGO).
11. Pinich, S., Srimuang, K., & **Sreshthaputra, A.** (2023). Optimization of Envelope Heat Gain and Interior Daylight Illuminance in Building Facade Design Under Reflectance Limitations: A Case Study of Office Buildings in Thailand. Nakhara: Journal of Environmental Design and Planning, Vol. 22 No. 3. DOI:https://doi.org/10.54028/NJ202322317
12. Pinich, S., Tachakitkachorn, T., **Sreshthaputra, A.** (2023). "Comparative analyses of Simulation and Measurement Data of Buildings Energy Consumption using Typical Weather Data and Real Weather Data in Hot-Humid Climate." ICCBEI 2023 BANGKOK THAILAND: Proceeding of the 5th International Conference on Civil and Building Engineering

- Informatics. the 5th International Conference on Civil and Building Engineering Informatics. Samyan Mitrtown, 944 Rama IV Rd, Wang Mai, Pathum Wan, Bangkok 10330.
13. Chorpech Panraluk and **Atch Sreshthaputra**. (2020). Guideline Development of Thermal Comfort for Energy Efficiency during Winter for Thailand's Senior Centers Using Survey and Computer Simulation. *Nakhara Journal*. Chulalongkorn University.
  14. Chorpech Panraluk and **Atch Sreshthaputra**. (2020). The Study of Thermal Comfort Zones for Developing the Government's Senior Community Centers Using Field and Laboratory Studies: A Case Study in Phitsanulok, Thailand. *Humanities, Arts and Social Sciences Studies Journal*. Silpakorn University.
  15. Chorpech Panraluk and **Atch Sreshthaputra**. (2019). Developing Guidelines for Thermal Comfort and Energy Saving during Hot Season of Multipurpose Senior Centers in Thailand. *Sustainability Journal*. Special Issue "A Healthy Built Environment for an Ageing Population" (ISSN 2071-1050).
  16. Chorpech Panraluk and **Atch Sreshthaputra**. (2017). Thermal Comfort of Elderly in Public Health Service Buildings of Thailand. *Proceeding of the 3<sup>rd</sup> ICCASCE Conference*. July 14-16, 2017. Seoul. South Korea.
  17. **Sreshthaputra, A.** (2007). Coupled thermal & airflow simulation of a Thai Buddhist temple: a parametric study for design and operation guidelines. *Chulalongkorn University Building & Environment Design+Research Series (CUBE): Volume 2*. Department of Architecture, Chulalongkorn University.
  18. **Sreshthaputra, A.**, Haberl, J., and Andrews, M.J. (2004). Improving building design and operation of a Thai Buddhist temple using transient coupled DOE-2/CFD simulations. *Energy and Buildings*. Vol 36, Issue 6, pp. 481-494 (June 2004) Elsevier.
  19. Claridge, D., Abushakra, B., Haberl, J., and **Sreshthaputra, A.** (2003). Electricity diversity profiles for energy simulation of office buildings (ASHRAE 1093-RP). *ASHRAE Transactions*. American Society of Heating, Refrigerating, and Air-Conditioning Engineers (Submitted for Review).
  20. Haberl, J., **Sreshthaputra, A.**, Claridge, D., and Kissock, K. (2003). Inverse Model Toolkit: Application and Testing. *ASHRAE Transaction*. 2003 Annual Meeting. The American Society of Heating, Refrigerating, and Air-Conditioning Engineers.
  21. **Sreshthaputra, A.** (2003). Building design and operation for improving thermal comfort in naturally ventilated buildings in a hot-humid climate. *Ph.D. Dissertation*. Texas A&M University, College Station, USA.
  22. **Sreshthaputra, A.**, Haberl, J., and Andrews, M.J. (2001). 3-D Studies of heat transfer and airflow in an unconditioned Thai Buddhist temple. *Journal of Energy, Heat, and Mass Transfer* 22 (2001): pp 455-471 (Printed in 2002).
  23. Haberl, J., **Sreshthaputra, A.**, Claridge, D., and Turner, D. (2001). Measured energy use indices for 27 office buildings. *Proceeding of the ICEBO Conference*. July 16-19, 2001. Hyatt Regency Austin, Texas. International Conference for Enhanced Building Operation.
  24. **Sreshthaputra, A.**, Haberl, J., and Claridge, D. (2001). Detailed Test Results: Development of a toolkit for calculating linear, change-point linear and multiple-linear inverse building energy analysis models. *Technical Report*. ESL-TR-01/05-01. College Station, TX: Energy Systems Laboratory, Texas A&M University.
  25. **Sreshthaputra, A.**, Abushakra, B., Haberl, J., and Claridge, D. (2000). Data visualization for quality-check purposes of monitored electricity consumption in all office buildings in the ESL database. *Technical Report*. ESL-TR-00/03-01. College Station, TX: Energy Systems Laboratory, Texas A&M University.
  26. Kootin-Sanwu, V., **Sreshthaputra, A.**, and Haberl, J. (2000). Short-term monitoring to diagnose comfort problems in a residence in central Texas. *Proceeding of the Twelfth Symposium on Improving Building Systems in Hot and Humid Climates*, May 15-17, 2000. College Station, TX: Texas A&M University.

