

ONE-PAGE SUMMARY

Zheng O'Neill, Ph.D., P.E.

Education

Ph.D. 2004 Oklahoma State University, Stillwater, OK
M.S. 2000 Tongji University, China

Current Position

Professor, Mechanical Engineering, Texas A&M University
Associate Director, Energy Systems Laboratory, Texas A&M Engineering Experiment Station

Interests and Expertise

Thermal Energy Systems Design, Analysis, Modeling, Simulation, and Optimization; Intelligent Building Energy and Control Systems; Building-to-Grid Integration; Smart and Connected Community and Smart City; Heat Pump Technologies; Uncertainty Quantification in HVAC/R Systems and Buildings; Building Information Modeling and its Applications in Building Operations

Awards and Distinctions

- ASHRAE Crosby Field Award – *The Best Paper Presented before the Society*. 2024
- Texas A&M Engineering Genesis Award. 2020, 2023
- ASHRAE Fellow. 2021; IBPSA Fellow. 2021
- J. Mike Walker '66 Career Development Professorship, 2020 -2024
- *Best Paper Award for Building Simulation: An International Journal*. 2013, 2021
- Texas A&M J. Mike Walker '66 Faculty Fellow II. 2020-2022
- The University of Alabama *President's Faculty Research Award*. 2019
- ASHRAE *Distinguished Service Award*. 2019
- IBPSA-USA *Emerging Contributor Award*. 2018
- ASHRAE *Innovative Research Grant (IRG) Award*. 2017
- ASHRAE Birmingham Chapter *Educator of the Year*. 2016
- DOE Industrial Assessment Center *Junior Faculty Research Award*. 2015
- United Technologies Research Center *Outstanding Achievement Award*. 2010

Publications

- Book chapters: 3; Patent: 1
- Journal papers: 100; Refereed conference papers: 110

External Research Grants since 2014

- \$30.6M (O'Neill's share: \$15.56M - \$13.34M personal share at TAMU)
- 46 projects funded by ARPA-E, ASHRAE, DOD, DOE, NSF, and private industry

Courses Taught

- Heat Transfer; Thermal Engineering Survey; Intermediate Design; Smart Building Technology
- Heating, Ventilating and Air-Conditioning Design; Principle of Building Energy Analysis
- Computational-based Engineering of Energy Systems (Building Modeling and Simulation)

Student/Postdoctoral Researcher Advising

- Ph.D. students: 18 (completed: 7, in progress: 11); MS students: 11 (completed: 9, in progress: 2)
- Postdoctoral Research Associates/Research Engineers: 4 (completed: 2, in progress: 2)

Professional Services

Member of ASHRAE's Research Administration Committee (RAC)
Voting and Corresponding Members of various ASHRAE Technical Committees (TC)
Chair of ASHRAE TC 7.5 Smart Building Systems; Program Chair of TC 1.13 Optimization
Editorial Board, Journal of Building Performance Simulation; Applied Thermal Engineering
Associate Editor, Science and Technology for the Built Environment (ASHRAE's Research Journal)