

## FACULTY VITAE – ABET Format

- 1. Name:** Rambod Rayegan
- 2. Education:** B.S.M.E., University of Tehran, Tehran, Iran, 1996.  
M.S.M.E., University of Tehran, Tehran, Iran, 1998.  
Ph.D., M.E., Florida International University, Miami, Florida, 2011.
- 3. Academic Experience:**

Sept. 2019-Present	Prairie View A&M University, Mechanical Engineering Department, Associate Professor.
Sept. 2013-Aug. 2019	Prairie View A&M University, Mechanical Engineering Department, Assistant Professor.
Sept. 2012-Aug. 2013	University of North Texas, Mechanical and Energy Engineering Department, Visiting Assistant Professor.
Sept. 2011-Aug. 2012	University of North Texas, PACCAR Technology Institute, Post-Doctoral Research Associate.
Jan. 2007-Aug. 2011	Florida International University, Building Energy and Environment Research Center, Research Assistant.
Jan. 2003-Sept. 2006	Semnan University, Mechanical Engineering Department, Semnan, Iran, Lecturer.
- 4. Non-Academic Experience**

Jul. 2000-Nov. 2006	Neghsh-e-sharestan Consulting Engineers, Tehran, Iran, Mechanical (HVAC) Design Engineer
Sept. 1997-Sept. 2003	Azarab Industries Company, Tehran, Iran, Mechanical Design Engineer in the field of Hydropower Plants
Nov. 1996-Dec. 1997	Iran Steel Plants (I.S.P.) Group, Tehran, Iran, Mechanical (HVAC) Design Engineer
- 5. Certification or Professional Registration:** Iranian Society of Professional Engineers
- 6. Current Membership in Professional Organizations:**  
Members of ASHRAE, ASME, and ASEE
- 7. Honors and Awards**
  - Prairie View A&M University, Roy G. Perry College of Engineering Outstanding Teaching Award, 2018.
  - Prairie View A&M University, One-Time Merit Award for Exceptional Work and Dedication to Students, October 2018.
- 8. Major Service Activities**
  - Member of University Marketable Skills Leadership Team, February 2018 – Present
  - Attended in Marketable Skills Conference hosted by Texas Higher Education Coordinating Board as a PVAMU representative, April 2018
  - Primary Faculty Advisor for Pi Tau Sigma International mechanical Engineering Honor Society, January 2016- Present
  - Reviewer for Summer Research Mini-Grant Program, Prairie View A&M University, Office of Research & Graduate Studies.
  - Reviewer for limited submission NSF grants, Prairie View A&M University, Office of Research & Graduate Studies.
  - Mentor, Summer Research Experience Program, Research Experience for Undergraduates (REU)

## 9. Selected Publications and Presentations

- Tao, Y. X., **Rayegan, R.**, Hasib, A., Xiong, G., Hasib, H., Talele, S., 2016, “A Review of International Research in Zero-Energy Buildings,” in Analytics for Building-Scale Sustainable Ecosystems (BSSE) – US-China Research Perspectives, Edited by: Y. X. Tao and Y. Jiang, Begell House, New York, Connecticut, USA, ISBN: 978-1-56700-279-9.
- Zhu, Y., **Rayegan, R.**, Tao, Y. X., “Case Study of Ground-Source Heat Pump Applications in Hot and Humid Climates”, Journal of Architectural Engineering, 2015, 21(1): 05014006.
- Ming, T., Chen, D., Nahang Toudeshki, S., Talele, S., Checkettsm G.T., Hasib, N., Wicaksono C., Xiong, G., Qiu, Y., Peng, C, Mun, J., **Rayegan, R.**, Tao, Y.X., “A Zero Energy Lab as a validation testbed: Concept, features, and performance”, International Journal of Hydrogen Energy, 2015; 40(37): 12854–12867
- **Rayegan, R.**, Tao, Y. X., “Optimal Collector Type and Temperature in a Solar Organic Rankine Cycle (ORC) System for Building-Scale Power Generation in Hot and Humid Climate,” ASME Transactions, Journal of Solar Energy Engineering, 2012; 135(1): 011012(1-9).
- Zhu, Y., Tao, Y. X., **Rayegan, R.**, “A Comparison of Deterministic and Probabilistic Life Cycle Cost Analyses of Ground Source Heat Pump (GSHP) Applications in Hot and Humid Climate,” Energy and Buildings, 2012; 55:312–321.
- Tao, Y. X., **Rayegan, R.**, 2011, “Solar Energy Applications and Comparisons,” in Energy and Power Generation Handbook: Established and Emerging Technologies, Edited by: K.R. Rao, ASME Press, New York, USA, ISBN: 9780791859551.
- **Rayegan, R.**, Tao, Y. X., “A Procedure to Select Working Fluids for Solar Organic Rankine Cycles (ORCs),” Renewable Energy, 2011; 36 (2): 659-670.
- **Rayegan, R.**, “Using Distinctive Student Engagement Elements in a Technical Elective Course”, American Society of Engineering Education (ASEE) Annual Conference, Salt Lake City, Utah, June 2018.
- **Rayegan, R.**, Maddah, A. “A Review on Zero-Energy Buildings Research”, 26<sup>th</sup> Annual International Conference of Iranian Society of Mechanical Engineers – ISME 2018, Semnan, Iran, April 2018.
- Hasib, A. M. M., **Rayegan, R.**, Tao, Y.X., “Investigation of Using Dispersed Particle and Branching Heat Exchanger in Medium Temperature Thermal Energy Storage System to Achieve the Maximum Utilization of Solar,” ASME International Mechanical Engineering Congress & Exposition, Volume 8B: Heat Transfer and Thermal Engineering, San Diego, California, November 2013.
- **Rayegan, R.**, Tao, Y.X., “Analysis of Low Temperature Solar Organic Rankine Cycle for a Net Zero Commercial Building in Hot and Humid Climate,” 2nd Asian-US-European Thermophysics Conference: Thermal Science for Sustainable World, HongKong, January 2012.

## 10. Major Professional Development Activities

- Texas A&M Engineering Experiment Station (TEES) Annual research Conference, College Station, June 2016
- Texas A&M Engineering Experiment Station (TEES) Thematic Research Meeting-Energy Systems and Services, Corpus Christi, March 2016
- Texas A&M Engineering Experiment Station (TEES) Thematic Research Meeting- Materials & Manufacturing and Infrastructure, Prairie View, March 2016
- Making Net Zero Net Positive: Solving the Efficiency & Cost Paradox Webcast Held by American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), April 2016
- National Science Foundation (NSF) ’s Major Research Instrumentation Proposal Development/ Research Initiation Awards (RIA) Proposal Development Workshop Held by Quality Education for Minorities (QEM) Network, Washington DC, August 2015
- NSF CAREER and Other Young Investigator Programs Webinar Held by Texas A&M Engineering Experiment Station, April 2015
- IUSE Engineering Forum with NSF Program Officers Held by NSF Division of Undergraduate Education (DUE), in collaboration with Virtual Faculty, October 2014