CURRICULUM VITAE
Dennis L. O'Neal

Education:

B.S. Texas A&M University, Nuclear Engineering, 12/73
M.S. Oklahoma State University, Mechanical Engineering, 5/77
Ph.D. Purdue University, Mechanical Engineering, 12/82

Experience:

Dean of the School of Engineering and Computer Science, Baylor University, Waco, Texas, August, 2012 - present.

Responsible for directing a program that includes three departments (Mechanical Engineering, Electrical and Computer Engineering, and Computer Science) and approximately 50 faculty and 1100 students. Led the engineering programs successfully through an ABET accreditation in 2012 and the computer science program in 2014. Successfully got new Ph.D. programs in Mechanical Engineering (2014) and Computer Science (2016) approved. Increased minimum entrance requirements for undergraduates in 2014 and again in 2015 to manage size of the undergraduate class. Created undergraduate programs office including a complement of four full-time advisors.

Associate Dean for Research, Dwight Look College of Engineering, and Deputy Director, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas, May 2011 – August, 2012.

This was a dual position appointment. As the Associate Dean of Engineering, I work with the Dean and department heads to strategize on research direction and help solve resource issues with research contracts. I also oversee compliance issues related to research in the College. As the Deputy Director for TEES, I act as the chief operating officer of this state agency whose mission is to grow engineering and research infrastructure across the state, particularly in the regional campuses of the Texas A&M University System. In FY 2011, TEES generated nearly $150 million in revenue from research contracts.

Department Head, Department of Mechanical Engineering, Texas A&M University, College Station, Texas, May, 2003 – April 2011(Served as Interim head from May 2003-2004).

Was responsible for all aspects of a department of approximately 1150 undergraduates, 400 graduate students, 60+ tenure/tenure-track faculty, 7 non-tenure track faculty, and 28 staff. Responsibilities included hiring faculty and staff, budgeting, development activities with alumni and companies, and determining priorities for the program. Last academic budget was approximately $8 million and annual research expenditures were about $15 million. Hired 32 new faculty in eight years, including nine who won NSF CAREER awards and one won a Presidential Early Career Award for Scientists and Engineers (PECASE). Successfully led the department through ABET accreditation visits in 2004 and 2010. Raised approximately $4 million in new endowments for the department. Also responsible for the startup and staffing the Mechanical Engineering Program at our branch campus in Doha, Qatar, in the Middle East.

Associate Department Head, Department of Mechanical Engineering, Texas A&M University, College Station, Texas, September, 2002 – May, 2003.

Was responsible for the undergraduate program, including running an advising office with two professional advisors. Made decisions on students being admitted into our upper division (sophomore) program, students being removed from the program, and scholarship recipients. Provided fiscal analysis for the department head and headed a strategic planning initiative.

Holdredge/Paul Professor, Department of Mechanical Engineering, Texas A&M University, College Station, Texas, August, 2002 – August, 2012.

Endowed professorship recognizing excellence in the teaching and academic contributions.

Faculty Sabbatical, Sandia National Laboratories, Albuquerque, NM, August 2000-August 2001 and May 2002-August 2002.

Conducted finite element modeling of decomposition of polymer foams subjected to high ambient temperatures from fires. Utilized finite element modeling to help design experiments for wall components subjected to fires. Sandia National Laboratories was operated by Lockheed Martin.

Professor, Department of Mechanical Engineering, Texas A&M University, College Station, Texas, September, 1994 – August 2002. Associate Professor, 1988. Initial appointment as Assistant Professor, 1983.

Conducted research, primarily in heat pumps, frost formation, energy management, and HVAC systems in buildings. Supervised M.S. and Ph.D. graduate students. Responsible for coordinating thermodynamics courses for the department and college from 1996-2000 where we had over 1000 students/year taking the course. Served as the thermal/fluids division leader for three years, coordinating teaching assignments for approximately 20 faculty. Won both teaching and research awards from the department/college.

Graduate Teaching and Research Assistant, Purdue University, West Lafayette, Indiana, Aug., 1980 – Dec., 1982.

Taught undergraduate fluids laboratory and thermodynamics. Conducted research in frost formation on heat pump evaporators for my dissertation.

Research Staff Member, Oak Ridge National Laboratory, Oak Ridge, Tennessee, July, 1977 - August, 1980.

Evaluated efficiency improvements in heat pumps, air conditioners, and water heating systems. Worked on a team to develop an energy forecasting model for the U.S. residential sector. Oak Ridge was operated by Union Carbide at that time.

Research Assistant, Oklahoma State University, Stillwater, Oklahoma, July, 1974 - May, 1977.

Measured and modeled both airborne and fluid-borne noise in hydraulic systems used in large commercial and military equipment. Developed thermodynamic model of the OSU power plant.

Consulting Experience:

Solar Energy Research Institute, 1980
Oak Ridge National Laboratory, 1980-81
Lawrence Berkeley Laboratory, 1983-85, 1989-91
Purdue University, 1986-87
Entergy Services, 1989-90, 1992
Consolidated Edison, 1989, 1992
Jerry Jackson & Associates, 1988-1991, 1992-93, 1999
Northwest Power Planning Council, 1991-1992
Washington Water Power, 1992
Environmental Protection Agency, 1992
Alumax, Inc., 1996-97
Locke, Purnell, Rain, Harrell, 1997
Oarsman Corporation, 1998-99
Electric Power Research Institute, 1999
Abboud and Ware, 1999
Environmental Evaluation Group, 1999
Rayborn Johnson, 2002-2004
Sentech, Inc., 2003
Eggleston and Briscoe, 2006

Professional Registration:

Texas, No. 58920

Honor and Awards:

Phi Eta Sigma Honorary Society, 1970
Graduated Magna Cum Laude, Texas A&M University, 1973
Chevron Fellowship, Purdue University, 1981-1982
Elected to Sigma Xi, the Scientific Research Society, 1988
ASHRAE, Certificate of Appreciation for Contributions to Educational Excellence, 1990
Research Fellow, Texas Engineering Experiment Station, 1991, 1994
Phi Kappa Phi Honor Society, 1992
Outstanding Undergraduate Teaching, Dept. of Mechanical Engineering, Texas A&M University, 1994
Phillips Petroleum Fellow, Texas A&M University, 1996
Distinguished Teaching Award, Dwight Look College of Engineering, Texas A&M University, 1997
Senior Fellow, Texas Engineering Experiment Station, 1997
Distinguished Service Award, ASHRAE, 1997
Senior Research Fellow, Texas Engineering Experiment Station, 1997
Fellow, ASHRAE, 1998
E.D. Brockett Professorship, Dwight Look College of Engineering, Texas A&M University, 1998
Holdredge/Paul Professorship, 2002
Outstanding Corps of Cadets Mentor, 2005
Fellow, American Society of Mechanical Engineers, 2009
ASHRAE: Best Technical Paper, 2011, 2012, 2015, 2016, 2018
ASHRAE: Crosby Field Award, 2012, 2013

Books or Authoritative Reference:

D. L. O'Neal, "Refrigeration", Chapter in the Mechanical Engineers Handbook, Third Edition, Wiley, 2005.

O'Neal, D., and Bryant, J., "Air Conditioning Systems", Chapter, Handbook of Heating, Ventilation and Air Conditioning, CRC Press LLC, Boca Raton, FL., 2001.

Reviewed Journal Publications:
* Indicates past or present student

1. D. O'Neal, J. Cramer, and P. Yin, "Part-Load and Power Model of Multi-Speed Fan-Coil Units with Electronically Commutated Motors, Accepted for *ASHRAE Transactions*, 127(1), January 2021.
2. D. L. O'Neal and P. Yin, "An improved part-load airflow and power model for fan-powered terminal units with electronically commutated motors," Science and Technology for the Built Environment, https://dx.doi.org/10.1080/23744731.2020.1787084 , 2020.
3. D. O'Neal and P. Yin, "Using Normalized Airflows and Power to Model the Performance of Multi-speed Fan-Coil Units with Permanent Split Capacitor Fan Motors, *ASHRAE Transactions*, 126(2), June 2020.
4. T. Zhang, D. O'Neal, and S. McClain, "Impact of Environmental Conditions on Frost Crystal Structure, *International Journal of Air-Conditioning and Refrigeration*, https://dx.doi.org/10.1142/S2010132520500145 , 2020.
5. S. Woo, Y. Matvienko, and D.L. O'Neal, "Improving fatigue of mechanical systems such as freezer drawer subject to repetitive stresses," *Engineering Failure Analysis*, 110 (2020) 104404.
6. T. Zhang*, D. L. O'Neal, and S. McClain, "Analysis of frost thickness and roughness growth from the perspective of frost crystal structure," *International Journal of Refrigeration*, 112 (2020), pp.314-322.

7. P. Yin*, B. Derouen, A. McBride, and D. L. O'Neal, "Laboratory performance measurement of blowers with electronically commutated motors in horizontal low-profile fan-coil units," *ASHRAE Transactions* 126 (1), Jan. 2020.
8. D. L. O'Neal and P. Yin*, "A simple airflow and power model of fan-coil units with permanent split-capacitor motors," *ASHRAE Transactions*, 126(1), Jan. 2020.
9. S. Woo*, M. Pecht, and D. L. O'Neal, "Reliability design and case study of the domestic refrigerator compressor subjected to repetitive internal stresses," *Reliability Engineering and System Safety*, Vol. 193, Jan. 2020.
10. Z. Sardoueinasab, Peng Yin*, and D. O'Neal, "Energy modeling and analysis of variable airflow parallel fan-powered terminal units using Energy Management System (EMS) in EnergyPlus," *Journal of Building Performance Simulation*, Vol 13. No. 1, pp. 1-12, Nov. 2019.
11. D. L. O'Neal, J. Cramer*, and P.Yin*, "Field evaluation of the performance of fan coil units with permanent split capacitor fan motors," Science and Technology for the Built Environment, 25:10, 1359-1368, https://doi.org/10.1080/23744731.2019.1608112, 2019.
12. S. Woo and D. L. O'Neal, "Reliability design and case study of mechanical system like a hinge kit in a refrigerator subjected to repetitive stresses," *Engineering Failure Analysis*, Vol. 99, pp. 319-329, May 2019.
13. T. Zhang* and D. L. O'Neal, "Phase Transition of Water Droplets with Different Static Contact Angles," *Heat Transfer Research*, Vol. 50, Issue 4, pp. 381-397, Feb. 2019.
14. S. Woo* and D. L. O'Neal, "Improving the Reliability of Mechanical Components That Have Failed in the Field due to Repetitive Stress," *Metals*, Vol. 9, Issue 1, Jan. 2019.
15. Z. Sardoueinasab, Peng Yin*, and D. O'Neal, "Energy Modeling and Analysis of Inherent Air Leakage from Parallel Fan-Powered Terminal Units using EMS in EnergyPlus," *Energy and Buildings*, Vol. 176, pp. 109-119, Oct. 2018
16. B. Dooley*, T. Zhang*, and D. L. O'Neal, "Optonumerical technique for mapping freezing droplet interactions on substrates," *Optical Engineering*, 57(9) pp. 094108-1-9, Sept. 2018.
17. D. Lu*, D. L. O'Neal, and P. Yin*, "An Evaluation of Two Cooling Control Strategies with Variable-Airflow Series Fan-Powered Terminal Units," *ASHRAE Transactions*, HO-18-006, 124(2), pp. 38-51, June 2018.
18. P. Yin*, D. L. O'Neal, and D. Lu*, "Annual Energy Performance Evaluation of Series and Parallel Fixed-Airflow Fan Powered Terminal Units," *ASHRAE Transactions*, CH-18-014, Vol. 124, Pt. 1, January 2018.
19. D. L. O'Neal, P. Yin*, and D. Lu*, "A Comparison of Fixed- and Variable-Airflow Series Fan-Powered Terminal Units," *ASHRAE Transactions*, CH-18-012, 124(1), pp. 121-136, January 2018.
20. P. Yin* and D. O'Neal, "Modeling Variable-Airflow Parallel Fan-Powered Terminal Units with a Mass and Energy Balance Approach," *ASHRAE Transactions*, CH-18-004, 124(1), pp. 12-21, January 2018.
21. P. Yin*, C. Reid*, and D. L. O'Neal, "Modeling Variable-Airflow Series Fan-Powered Terminal Units with a Mass and Energy Balance Approach," *ASHRAE Transactions*, CH-18-003, 124(1), pp. 22-31, January 2018.
22. G. Faris, D. Int-Hout, D. O'Neal, and P.Yin*, "Fan-Powered Terminal Units, Issues with Fan-Powered Terminal Unit Modeling" *ASHRAE Journal*, Vol. 59, No. 12, December 2017. pp. 42-45
23. G. Faris, D. Int-Hout, D. O'Neal, and P.Yin*, "Fan-Powered Terminal Units, Application and Modeling Implications from Past and Current Research, Part 2" *ASHRAE Journal*, Vol. 59, No. 11, November 2017. pp. 20-28.

24. G. Faris, D. Int-Hout, D. O'Neal, and P.Yin*, "Fan-Powered Terminal Units, Application and Modeling Implications from Past and Current Research, Part 1" *ASHRAE Journal*, Vol. 59, No. 10, October 2017. Pp. 18-24.
25. S. Woo* and D. L. O'Neal, "Improving the Reliability of the Cooling Enclosure in a Refrigerator," *Innovations in Corrosion and Materials Science*, Vol. 7, No. 2, July 2017.
26. P. Yin*, C. Reid*, and D. L. O'Neal, "Using a Mass and Energy Balance Approach to Model the Performance of Parallel Fan-Powered Terminal Units with Fixed Airflow Fans," *ASHRAE Transactions*, ST-16-026, 122(2), pp. 253-269, June 2016.
27. C. Reid*, D.L. O'Neal, and P. Yin*, "Characterizing the Performance of Fixed Airflow Series Fan-Powered Terminal Units Using a Mass and Energy Balance Approach," *ASHRAE Transactions*, ST-16-016, 122(2), pp. 240-252, June 2016.
28. S. Woo* and D. L. O'Neal, "Improving the Reliability of a Domestic Refrigerator Subjected to Repetitive Loading," *Engineering*, 2016, No. 8, pp. 99-115.
29. D. O'Neal, and J. Edmondson*, "Characterizing Air Leakage in Parallel Fan-Powered Terminal Units," *ASHRAE Transactions*, 122(1), pp. 343-353, January 2016.
30. S. Woo* and D. L. O'Neal, "Reliability Design of Mechanical Systems Subject to Repetitive Stresses," *Recent Patents on Mechanical Engineering*, Vol. 8, No. 3, pp. 222-234, 2015.
31. D. O'Neal, D. Ingram*, and C.L. Reid*, "Modeling Fan-Powered Terminal Unit Fan/Motor Combinations Controlled by Silicon Controlled Rectifiers", *ASHRAE Transactions*, 121(2), pp. 342-350, July 2015.
32. D. O'Neal, D. Ingram*, and C.L. Reid*, "A Simplified Model of the Fan/Motor Performance of Fan-Powered Terminal Units That Use Electronically Commutated Motors," *ASHRAE Transactions*, 121(2), pp. 306-320, July 2015.
33. D. O'Neal, "Development of Models to Simulate the Part-Load Performance of Oversized ECM Fan-Powered Terminal Units," *ASHRAE Transactions*, 121(2), pp. 321-333, July 2015.
34. P. Yin* and D. L. O'Neal, "Characterizing Airflow and Power of VAV Series Fan-Powered Terminal Units from Component Data – Part I", *ASHRAE Transactions*, SE-14-025, 120(2), June 2014.
35. P. Yin* and D. L. O'Neal, "Characterizing Airflow and Power of VAV Series Fan-Powered Terminal Units from Component Data – Part II", *ASHRAE Transactions*, SE-14-026, 120(2), June 2014.
36. D. L. O'Neal, J.L. Edmondson*, and P. Yin*, "Comparison of Performance Characteristics of SCR and ECM Controlled Series Fan Powered Terminal Units, *HVAC&R Research Journal*, Vol. 20, Issue 2, Feb. 2014.
37. M.A. Davis*, J.A. Bryant, and D. L. O'Neal, "Modeling the Performance of ECM and SCR Series Fan Powered Terminal Units in Single-Duct VAV Systems", *ASHRAE Transactions*, CH-12-017, 118(1), pp. 908-919. January 2012
38. M.A. Davis*, J.A. Bryant, and D. L. O'Neal, "Modeling the Performance of ECM and SCR Parallel Fan Powered Terminal Units in Single-Duct VAV Systems", *ASHRAE Transactions*, CH-12-018, 118(1), pp. 920-929. January 2012
39. J. Edmondson*, D. L. O'Neal, J. A. Bryant*, and M. A. Davis*, "Performance of Series Fan Powered Terminal Units with Electronically Commutated Motors", *ASHRAE Transactions*, ML-11-036, 117(2), pp. 876-884. June 2011.
40. J. Edmondson*, D. L. O'Neal, J. A. Bryant*, and M. A. Davis*, "Performance of Parallel Fan Powered Terminal Units with Electronically Commutated Motors", *ASHRAE Transactions*, ML-11-037, 117(2), pp. 885-893. June 2011.

41. S. Woo*, D. O'Neal, and M. Pecht, "Reliability Design of a Reciprocating Compressor Suction Reed Valve in a Common Refrigerator Subjected to Repetitive Pressure Loads", *Engineering Failure Analysis*, Vol. 17, Issue 4, pp. 979-991, June 2010.
42. S. Woo*, D. O'Neal, and M. Pecht, "Improving the Reliability of a Water Dispenser Lever in a Refrigerator Subjected to Repetitive Stresses", *Engineering Failure Analysis*, Vol. 16, Issue 5, pp. 1597-1606, July 2009.
43. S. Woo*, M. Pecht, and D. O'Neal, "Reliability Design and Case Study of a Refrigerator Compressor subjected to repetitive loads", *International Journal of Refrigeration*, Vol. 32, No.3, 2009.
44. B. Dooley*and D. O'Neal, "An Experimental Method for Determining the Time Constants of Capacitive Thin-Film Polymer Humidity sensors at Various Duct Air Velocities", *HVAC&R Research Journal*, Vol. 15, Number 5, pp. 663-682, Sept. 2008.
45. R. Bassiouny* and D. O'Neal, "A Numerical Estimate of Flexible Short-tube Flow and Deformation with R-134a and R-410a", *ASHRAE Transactions*, SL-08-043, 114(2), pp. 440-446. June 2008.
46. J. Furr*, D. O'Neal, M. Davis*, J. Bryant, and A. Cramlet, "Performance of VAV Parallel Fan-Powered Terminal Units: Experimental Results and Models", *ASHRAE Transactions*, NY-08-013, 114(1), pp. 83-90. January 2008
47. J. Furr*, D. O'Neal, M. Davis*, J. Bryant, and A. Cramlet*, "Performance of VAV Fan-Powered Terminal Units: Experimental Results and Methodology, *ASHRAE Transactions*, NY-08-012, 114 (1), pp. 75-82. January 2008.
48. J. Furr*, D. O'Neal, M. Davis*, J. Bryant, and A. Cramlet*, "Performance of Series VAV Fan-Powered Terminal Units: Experimental Results and Models, *ASHRAE Transactions*, NY-08-014, 114(1), pp. 91-7. January 2008.
49. J. Lloyd*, D. O'Neal, and R. Hogan, "Numerical Simulation Simplifications for Coupled Natural Convection and Radiation in Small Enclosures with a Cylindrical Obstruction", *Heat Transfer Engineering*, Vol. 28, No. 2, pp. 120-129, Feb. 2007.
50. T. Han*, D. O'Neal, and C. Ortiz, "Evaluation of Mixing Downstream of Tees in Duct Systems with Respect to Single Point Representative Air Sampling", *Health Physics*, Vol. 91, No.3, pp. 211-220, Sept. 2006.
51. Y. Seo*, A. R. McFarland, C. A. Ortiz, and D. L. O'Neal, "Mixing in a Square and a Rectangular Duct Regarding Selection of Location of Extractive Sampling of Gaseous Contaminants", *Health Physics*, Vol. 91, No. 1, pp. 47-57, July 2006.
52. S. Woo* and D. O'Neal, "The Effects of Elbows on the Accuracy of Liquid Flow Measurement with an Insertion Flowmeters", *ASHRAE Transactions: Research*, 4841, 112(1), pp. 195-201. January 2006.
53. T. Han*, D. O'Neal, A. McFarland, and C. Ortiz, "Evaluation of Mixing Elements in an L-Shaped Configuration for Application to Single Point Aerosol Sampling in Ducts", *International Journal of HVAC&R Research*, Vol. 11, No. 4, pp. 657-672, Oct. 2005.
54. B. Kim and D. O'Neal, " Effect of Refrigerant Flow Control on the Heating Performance of a Variable-Speed Heat Pump Operating and Low Outdoor Temperature", *ASME Journal of Solar Energy Engineering*, Vol. 127, pp. 287-286, May 2005.
55. R. Bassiouny* and D. O'Neal, "Analysis of Refrigerant Flow and Deformation for a Flexible Short-Tube using a Finite Element Model", *International Journal of Refrigeration*, Vol. 27, No. 2, pp. 176-183, March 2004.
56. V. Payne* and D. L. O'Neal, "A Mass Flow Rate Correlation for Refrigerants and Refrigerant Mixtures Flowing Through Short Tubes", *International Journal of HVAC&R Research*, Vol. 10, No. 1, pp. 73-87, Jan. 2004.

57. R.J. Watters*, D.L. O'Neal, and J. Yang*, "Frost/Defrost Performance of a Three-Row Fin Staged Heat Pump Evaporator", *ASHRAE Transactions: Research*, Vol. 108, Pt. 2, June 2002.

58. Y.C. Kim*, D.L. O'Neal, W.V. Payne*, and M. Farzad*, "Refrigerant Flow through Flexible Short-tube Orifices", *International Journal of HVAC&R Research*, Vol. 8, No. 2, pp. 179-190, April, 2002.

59. D. L. O'Neal, A. Rodriguez*, M. Davis*, and S. Kondepudi*,, "Return Air Leakage Impact on Air Conditioner Performance in Humid Climates", *ASME Journal of Solar Energy Engineering*, Vol. 124, No. 1, pp. 63-69, February, 2002.

60. R. Bassiouny* and D.L. O'Neal, "A Numerical Study of Pressure Distribution and Flow through Rigid Short-tube Orifices", *ASHRAE Transactions: Research*, Vol. 108, Pt. 1, pp. 128-133, January, 2002.

61. R. J. Watters*, D. L. O'Neal, and J. Yang*, "Effect of Fin Staging on Frost/Defrost Performance of a Two-Row Heat Pump Evaporator under Heavy Frosting Conditions (RP-1002)", *ASHRAE Transactions: Research*, 107(2), pp. 240-249. June 2001.

62. R. J. Watters*, D. L. O'Neal, and J. Yang*, "Effect of Fin Staging on Frost/Defrost Performance of a Two-Row Heat Pump Evaporator at Standard Heat Pump Test Conditions (RP-1002)", *ASHRAE Transactions: Research*, 107(2), pp. 250-258. June 2001.

63. W.V. Payne*, and D.L. O'Neal, "Multiphase Flow of Refrigerant 410A through Short Tube Orifices", *ASHRAE Transactions: Research*, Vol. 105, Pt. 2, pp. 66-74, June, 1999.

64. D. W. Nutter*, and D.L. O'Neal, D. L., "Modeling the transient outlet pressure and mass flow during flashing of HCFC-22 in a small non-adiabatic vessel," *Mathematical and Computer Modeling*, Vol. 29, pp. 105-116, No. 2, 1999.

65. Y. Gu* and D. L. O'Neal, "Development of an Equivalent Diameter Expression for Vertical U-Tubes Used in Ground-Coupled Heat Pumps", *ASHRAE Transactions: Research*, 104(2), pp. 347-355. June 1998.

66. Y. Gu* and D. L. O'Neal, "Modeling the Effect of Backfills on U-Tube Ground Coil Performance", *ASHRAE Transactions: Research*, 104(2), pp. 356-365. June 1998.

67. D.W. Nutter* and D.L. O'Neal, "An Experimental Investigation of the Use of an Auxiliary Heater to Promote More Vapor Generation during Flash Boiling of HCFC-22," *Experimental Heat Transfer*, Vol. 11, No. 1, pp. 41-57, April 1998.

68. M.A. Medina*, D.L. O'Neal and W.D. Turner, "A Transient Heat and Mass Transfer Model of Residential Attics Used to Simulate Radiant Barrier Retrofits - Part I: Development", ASME *Journal of Solar Energy Engineering*, Vol 120, No. 1, pp. 32-38, February 1998.

69. M.A. Medina*, D.L. O'Neal and W.D. Turner, "A Transient Heat and Mass Transfer Model of Residential Attics Used to Simulate Radiant Barrier Retrofits - Part II: Validations and Simulations", *ASME Journal of Solar Energy Engineering*, Vol. 120, No. 1, pp. 39-44, February 1998.

70. D. L. O'Neal, J.A. Bryant*, and B. Parker*, "Impact of Hydrophobic Coating on the Frost Buildup and Defrost Performance of a Heat Pump Evaporator", *Thermal Science and Engineering*, Vol. 6, No. 1, pp. 91-97. January 1998.

71. D.W. Nutter*, and D.L. O'Neal, "Visualization Study of Enhanced Flash Boiling of HCFC-22 with 5 mm Steel and Glass Spheres," *ASHRAE Transactions: Research*, 104(1), pp. 734-741, January 1998.

72. W. Vance Payne* and D.L. O'Neal, "Mass Flow Characteristics of R407c through Short Tube Orifices," *ASHRAE Transactions: Research*, Vol. 104, Pt.1, pp. 197-209. January 1998.

73. D.W. Nutter* and D.L. O'Neal, "Experimental Investigation of Steel Spheres as a Passive Enhancement Technique for Flash Boiling of HCFC-22," *Experimental Thermal and Fluid Science*, Vol. 15, No. 4, pp. 336-346. November 1997.

74. D.W. Nutter* and D.L. O'Neal, "The Influence of Orifice Size on the Mass Flow During Flash Boiling of HCFC-22 from a Small Vessel," *ASME Journal of Energy Resources Technology*, Vol. 119, No. 3, pp. 193-199. September 1997.

75. A. G. Rodriguez*, D. O'Neal, M. Davis* and S. Kondepudi*, "Effect of Reduced Evaporator Airflow on the High Temperature Performance of Air Conditioners", *Energy and Buildings*, Vol.24, No. 3, pp. 195-201. December 1996.

76. D. Winiarski*, and D. L. O'Neal, "A Quasi-Steady State Model of Attic Heat Transfer in the Radiant Barriers," *Energy and Buildings*, Vol. 24, No. 3, pp. 183-194. December 1996.

77. N. Muraya*, D. O'Neal and W. M. Heffington, "Thermal Interference of Adjacent Legs in a Vertical U-Tube Heat Exchanger for a Ground-Coupled Heat Pump", *ASHRAE Transactions: Research*, Volume 102, Pt. 2, pp.12-21, June 1996.

78. D. W. Nutter*, D. L. O'Neal and W. Vance Payne*, "Impact of the Suction Like Accumulator on the Frost/Defrost Performance of an Air-Source Heat Pump with a Scroll Compressor", *ASHRAE Transactions: Research*, Vol. 102, Pt. 1, pp. 284 – 290. January 1996.

79. Y. Kim* and D. L. O'Neal, "A Comparison of Critical Flow Models for Estimating Two-Phase Flow of HCFC 22 and HFC 134a Through Short Tube Orifices," *International Journal of Refrigeration*, Vol. 18, No. 7. December 1995.

80. Y. Gu* and D. L. O'Neal, "An Analytical Solution to Transient Heat Conduction in a Composite Region with a Cylindrical Heat Source," *ASME Journal of Solar Energy Engineering*, Volume 117, No. 3, pp. 242-248. August 1995.

81. J. S. Haberl, D. J. Bronson* and D. L. O'Neal, "Impact of Using Measured Weather Data vs. TMY Weather Data in a DOE-2 Simulation," *ASHRAE Transactions: Research*, Volume 101, Part 2, pp. 558-576. June 1995.

82. V. Payne* and D. L. O'Neal, "Defrost Cycle Performance for an Air-Source Heat Pump with a Scroll and a Reciprocating Compressor," *International Journal of Refrigeration*, Volume 18, No. 2, pp. 107-112. March 1995.

83. Y. Kim* and D. L. O'Neal, "A Semi-Empirical Model of Two-Phase Flow of Refrigerant-134a Through Short Tube Orifices," *Experimental Thermal and Fluid Science*, Volume 9, pp. 426-435. September 1994.

84. Y. Kim* and D. L. O'Neal, "The Effect of Oil on the Two-Phase Critical Flow of Refrigerant 134a through Short Tube Orifices," *International Journal of Heat and Mass Transfer*, Volume 37, No. 9, pp. 1377-1386. June 1994.

85. H. L. Noboa*, D. L. O'Neal, and W. D. Turner, "A Model of the Effect of Dust on the Emissivity of Radiant Barriers," *ASHRAE Transactions: Research*, 100 (2), pp. 23-30. June 1994.

86. W. Vance Payne* and D. L. O'Neal, "Examination of Variables for Use in Controlling Outdoor Coil Airflow in an Air-Source Heat Pump During Frost Forming Conditions," *ASHRAE Transactions: Research*, Volume 100, Part 2, pp. 131-139. June 1994.

87. M. Farzad* and D. O'Neal, "The Effect of Void Fraction Model on Estimation of Air Conditioner System Performance Variables Under a Range of Charging Conditions," *International Journal of Refrigeration*, Volume 17, No. 2, pp. 85-93. February 1994.

88. Y. Kim*, and D. L. O'Neal, "Two-Phase Flow of Refrigerant-22 Through Short-Tube Orifices," *ASHRAE Transactions: Research*, 100(1), pp. 323-334. January 1994.

89. M. Dobson*, D. L. O'Neal, and M. L. Wolfe, "A Non-Dimensional Analysis of Vertical Configuration Ground-Coupled Heat Pump Start-up," *ASME Journal of Solar Energy Engineering*, Volume 115, No. 6, pp. 220-225, November, 1993.

90. D. O'Neal and S. Katipamula*, "Development of a Non-Dimensional Air Conditioner Cycling Model Utilizing a First Order System Approach," *ASME Journal of Solar Energy Engineering*, Volume 115, No. 3, pp. 176-181. August 1993.

91. H. Noboa*, D. O'Neal, and W. D. Turner, "Calculation of the Shape Factor From a Small Rectangular Plane to a Triangular Surface Perpendicular to the Rectangular Plane without a Common Edge," *ASME Journal of Solar Energy Engineering*, Volume 115, No. 2, pp. 117-119. May 1993.

92. S. Kondepudi* and D. O'Neal, "Performance of Finned-Tube Heat Exchangers under Frosting Conditions: I. Simulation Model, and II. Comparison of Experimental Data with Model," *International Journal of Refrigeration*, Volume 16, No. 3, pp. 175-184, May 1993.

93. M. Farzad* and D. L. O'Neal, "Influence of the Expansion Device on Air Conditioner System Performance Characteristics Under a Range of Charging Conditions," *ASHRAE Transactions: Research*, 99 (1), pp.3-13, January 1993.

94. S. Katipamula* and D. O'Neal, "A Part Load Factor for a Heat Pump Derived from Laboratory Measurements, "*Energy and Buildings*, Volume 19, pp. 125-132, November, 1992.

95. M. Medina*, D. O'Neal, and W. Turner, "Effect of Attic Ventilation on the Performance of Radiant Barriers," *Journal of Solar Energy Engineering*, Volume 114, No. 4, pp. 234-239, November, 1992.

96. S. Katipamula and D. L. O'Neal, "Transient Dehumidification Characteristics of a Heat Pump in Cooling Mode," *Journal of Solar Energy Engineering*, Volume 113, No. 4, pp. 246-271, November, 1991.

97. S. N. Kondepudi and D. L. O'Neal, "Frosting Performance of Tube Fin Heat Exchangers with Wavy and Corrugated Fins," *Experimental Thermal and Fluid Science*, No. 4, pp. 613-618, November, 1991.

98. M. Farzad* and D. L. O'Neal, "System Performance Characteristics of an Air Conditioner Over a Range of Charging Conditions," *International Journal of Refrigeration*, Volume 14, No. 6, pp. 321-328, November, 1991.

99. D. O'Neal and S. Katipamula*, "Performance Degradation During On-Off Cycling of Single Speed Air Conditioners and Heat Pumps: Model Development and Analysis," *ASHRAE Transactions: Research*, 97 (2), pp. 316-323. June 1991.

100. S. Katipamula*, and D. O'Neal, "Performance Degradation During On-Off Cycling of Single Speed Air Conditioners and Heat Pumps: Experimental Results," *ASHRAE Transactions: Research*, 97(2), pp. 331-339. June 1991.

101. D. L. O'Neal, K. T. Peterson*, and N. Anand, "Effect of Short-Tube Orifice Size on the Performance of an Air-Source Heat Pump During the Reverse-Cycle Defrost," *International Journal of Refrigeration*, Volume 14, Part 1, pp. 52-57, January 1991.

102. D. L. O'Neal and M. Farzad*, "The Effect of Improper Refrigerant Charging on the Performance of an Air Conditioner with Capillary Tube Expansion," *Energy and Buildings*, Volume 14, No. 4, pp. 363-372, September 1990.

103. O'Neal, D. L. and Peterson, K.*, "A Comparison of Orifice and TXV Control Characteristics During the Reverse-Cycle Defrost," *ASHRAE Transactions*, Volume 96, Part 1, pp. 337-343, February, 1990.

104. N. K. Anand , J. S. Schliesing*, D. L. O'Neal and K. T. Peterson*, "Effects of Outdoor Coil Fan Pre-Start on Pressure Transients During the Reverse Cycle Defrost of a Heat Pump," *ASHRAE Transactions*, 95 (2), pp. 699-704. June 1989.

105. O'Neal, D. L., K. Peterson*, N. K. Anand, and S. Schliesing*, "Refrigeration System Dynamics during the Reverse Cycle Defrost," *ASHRAE Transactions*, 95(2), pp. 689-698. June 1989.

106. S. N. Kondepudi* and D. L. O'Neal, "The Effect of Frost Growth on the Performance of Louvered Finned Tube Heat Exchangers," *International Journal of Refrigeration*, Volume 12, No. 5, pp. 151-158, May, 1989.

107. D. L. O'Neal, S. Katipamula*, and S. Somasundaram, "Simulation of Dehumidification Characteristics of Residential Central Air Conditioners," *ASHRAE Transactions*, 94(2), pp. 829-849. June 1988.
108. D. L. O'Neal and N. Y. Chan*, "Evaluation of Performance Degradation Due to Inlet Elbow Orientation on a Small Forward-Curved Centrifugal Fan," *ASHRAE Transactions*, 94(1), pp. 265-374. January 1988.
109. S. Kondepudi* and D. L. O'Neal, "Performance of Triangular Spine Fins Under Frosting Conditions," *Journal of Heat Recovery Systems and CHP*, Volume 7, No. 4, 1987.
110. S. Kondepudi* and D. L. O'Neal, "The Effects of Frost Growth on Extended Surface Heat Exchanger Performance: A Review," *ASHRAE Transactions*, 93(2), pp. 258-274. June 1987.
111. S. Katipamula*, D. L. O'Neal, W. D. Turner and W. Murphy, "Experimental Study of Heat Transfer in Attics with a Small Scale Simulator," *ASHRAE Transactions*, 93 (1), pp. 122-134. January 1987.
112. D. L. O'Neal and D. Tree, "A Review of Frost Formation in Simple Geometries," *ASHRAE Transactions*, 91(2), pp. 267-281. June 1985.
113. D. L. O'Neal and D. Tree, "Measurement of Frost Growth and Density in a Parallel Plate Geometry," *ASHRAE Transactions*, 90 (2), pp. 178-190. June 1984.
114. K. Corum and D. L. O'Neal, "Investment in Energy Efficient Houses: An Estimate of Discount Rates Implicit on New Home Construction Practices," *Energy*, Volume 7, No. 4, pp. 389-400, 1982.
115. D. L. O'Neal and E. Hirst, "An Energy Use Model of the Residential Sector," *IEEE Transactions on Systems, Man and Cybernetics*, Volume SMC-10, No. 11, pp. 749-755, November, 1980.
116. D. L. O'Neal and E. Hirst, "Reducing Residential Energy Growth with More Efficient Space Heating Equipment," *ASHRAE Transactions*, 86 (2), pp. 311-326. June 1980.
117. E. Hirst, J. Carney, and D. L. O'Neal, "Alternative Technologies for U.S. Residential Water Heating: Energy Savings and Economic Benefits," *Energy Policy*, Volume 7, No. 4, pp. 307-320, December, 1979.
118. E. Hirst and D. L. O'Neal, "Contributions of Improved Technologies to Reduced Residential Energy Growth," *Energy and Buildings*, 2, 1979.
119. E. Hirst, J. Carney and D. L. O'Neal, "Feasibility of Zero Residential Energy Growth," *Energy*, Volume 3, No. 4, pp. 427-438, August, 1978.
120. G. E. Maroney and D. L. O'Neal, "Hydrostatic Transmission Noise Abatement," Paper 770560, *SAE Transactions*, Volume 86, September, 1977.

Reviewed Conference Publications:
* Indicates past or present student

1. S. McClain, T. Zhang, S. Ahmed, G. Stafford, D. O'Neal, and J. Riley, "A Climate Facility and Apparatus for Investigations of Cold Soaked Fuel Frost Evolution," Technical Paper, AIAA Aviation Forum, American Institute of Aeronautics and Astronautics, June 2020.
2. Z. Sardoueinasab, P.Yin*, and D. L. O'Neal, " Air Leakage Analysis and Modeling in Parallel Fan-Powered Terminal Units Using EnergyPlus, ASHRAE Transactions: Extended Abstract, KC-19-A016, June 2019
3. P. Yin*, Z. Sardoueinasab, and D. L. O'Neal, "Comparison of Hydronic Fan-Coil Unit Energy Consumption with Modulation and On-Off Controls, ASHRAE Transactions: Extended Abstract, KC-19-A014, June 2019
4. D. L. O'Neal and P. Yin*, "A Field Evaluation of the Airflow Performance of Fan-Coil Units," ASHRAE Transactions: Extended Abstract, KC-19-A013, June 2019.

5. T. Miyauchi, S. McClain, T. Zhang, D. O'Neal, and J. Riley, "Photogrammetric Frost Roughness Measurements in Cold-Soaked Conditions," SAE International, Technical Paper 0148-7191, June 2019.
6. S. Woo* and D. L. O'Neal, "Reliability Design of the Hinge Kit System (HKS) in a Commercial Refrigerator Subjected to Repetitive Impact Loading," The Biennial International Conference on Experimental Solid Mechanics, Tehran, Iran, Feb. 2018.
7. S. Woo* and D. L. O'Neal, "Improving the noise of a mechanical compressor subjected to repetitive pressure loading," Proceedings of 2nd International Conference on Maintenance Engineering, IncoME-II 2017, The University of Manchester, UK, ME2017_1127, September 2017.
8. D. O'Neal, P. Yin*, and D. Ingram*, "Evaluation of Fan Models for Application to ECM Fan/Motor Combinations", ASHRAE and IBPSA-USA SimBuild 2016, Building Performance Modeling Conference, Salt Lake City, UT, August 2016.
9. D. O'Neal and C. Skurla, "Developing an Enrollment Model for Evaluating Alternative Standards for Admission into Engineering ', Sixth Annual First Year Engineering Experience Conference (FYEE), American Society for Engineering Education, College Station, TX, August 2014.
10. D. O'Neal and J. Bryant*, "Performance Evaluation of a Ventilation Air Heat Pump," ASHRAE Transactions: Symposia, Vol. 116, Pt. 2, June 2010.
11. J. Bryant*, M. Davis*, and D. O'Neal, "Energy Use Comparison for Series vs. Parallel Fan Powered Terminal Units in a Single Duct Variable Air Volume System," ASHRAE Transactions: Symposia, Vol. 116, Pt. 2, June 2010.
12. J. Bryant*, D. O'Neal, and M. Davis*, "Performance of VAV Fan Powered Terminal Units: An Evaluation of Operation Control Strategies for Series vs. Parallel Units", ASHRAE Transactions: Symposia, Vol. 116, Pt. 2, June 2010.
13. J. Bryant*, D. O'Neal, M. Davis*, and A. Cramlet*, "Experimental Verification of a Three Zone VAV System Model Operating with Fan Powered Terminal Units", ASHRAE Transactions: Symposia, Vol. 115, Pt. 1, CH-09-032, January 2009.
14. M. Davis*, J. Bryant*, and D. O'Neal, "Modeling the Performance of Single-Duct VAV Systems that use Fan Powered Terminal Units", ASHRAE Transactions: Symposia, Vol. 115, Pt. 1, January 2009
15. S. Woo*, D. L. O'Neal, and Y. Kim*, "Reliability Design and Case Study of a Refrigerator Compressor Subjected to Repetitive Loads", Proceedings of the International Mechanical Engineering Conference and Exhibition, Seattle, WA, Nov. 2007
16. S. Woo*, J. Lim, and D. L. O'Neal, "Reliability Design of a Crankshaft Subjected to Repetitive Loads", Proceeding of the 22nd IIR International Congress of Refrigeration, Beijing, China, August 2007.
17. S. Woo* and D. L. O'Neal, "Reliability Design of The Newly Designed Reciprocating Compressor for a Refrigerator", Proceedings of the Compressor Engineering Conference, Purdue University, West Lafayette, Indiana, July 2006.
18. B. H. Kim and D. L. O'Neal, "Effect of Refrigerant Flow Control on the Performance Variation of a Variable Speed Heat Pump Operating at Low Outdoor Temperature", Proceedings, Renewable and Advanced Energy Systems for the 21st Century, Joint ASME, KSME, ASHRAE, JSME, SAREK, JSES Conference, Maui, Hawaii, April 1999.
19. M.A. Corley*, and D. L. O'Neal, "Verifying Differential Pressure Transmitter Operation", Proceedings, Renewable and Advanced Energy Systems for the 21st Century, Joint ASME, KSME, ASHRAE, JSME, SAREK, JSES Conference, , Maui, Hawaii, April 1999.
20. J. Haberl, S. Thamilseran, T. Reddy, D. Claridge, D. O'Neal, and W. D. Turner, "Baseline Calculations for Measurement and Verification of Energy and Demand Savings in a Revolving Loan Program in Texas", ASRHAE Transactions: Symposia, Vol. 104, Pt. 2, June 1998.

21. D. Nutter* and D.L. O'Neal, "Shortening the Defrost Cycle Time with Active Enhancement within the Suction-Line Accumulator of an Air-Source Heat Pump", Proceedings of the ASME Advanced Energy Systems Division, AES-Vol. 36, pp. 59-68, ASME International Mechanical Engineering Congress and Exposition, Atlanta, Georgia, Nov. 17-22, 1996.
22. D.L. O'Neal, A. Rodriguez*, M. Davis*, and S. Kondepudi*, "Impact of Return Air Leakage on Air Conditioner Performance in Humid Climates", Proceedings of the ASME Advanced Energy Systems Division, AES-Vol. 36, pp. 107-114, ASME International Mechanical Engineering Congress and Exposition, Atlanta, Georgia, Nov. 17-22, 1996.
23. J. A. Bryant* and D. L. O'Neal, "Effect of 90° Elbow on the Accuracy of an Insertion Flowmeter, Results and Comparisons for 4 and 6" Diameter PVC Pipe", Proceedings of the Tenth Symposium on Improving Building Systems in Hot and Humid Climates, Ft. Worth, Texas, May 13-14, 1996.
24. D. L. O'Neal, A. Rodriguez*, M. Davis*, and S. Kondepudi, "Effect of Return Air Leakage on Air Conditioning Performance in Hot/Humid Climates", Proceedings of the Tenth Symposium on Improving Building Systems in Hot and Humid Climates, Ft. Worth, Texas, May 13-14, 1996.
25. J. Bryant*, B. Parker* and D. L. O'Neal, "The Use of Hydrophobic Coatings to Delay Frost Accumulation on a Heat Pump Heat Exchanger," Heat Pump and Refrigeration Systems Design Analysis and Applications, ASME International Mechanical Engineering Congress and Exposition, San Francisco, California, November, 1995.
26. Y. Gong, J*. A. Bryant* and D. L. O'Neal, "Heat Transfer and Temperature Distribution of a Droplet during Phase Transition," Proceedings of 1995 National Heat Transfer Conference, HTD-Volume 313, pp. 65-80, Portland, Oregon, August 6-8, 1995.
27. M. Dobson*, D. L. O'Neal, and W. Aldred, "A Modified Analytical Method for Simulating Cyclic Operation of Vertical U-Tube Ground-Coupled Heat Pumps," Solar Engineering 1995, ASME/JSME International Solar Energy Conference, pp. 69-76, Maui, Hawaii, March 19-24, 1995.
28. B. Parker* and D. L. O'Neal, "Effect of Ninety Degree Elbow on the Accuracy of a Non-Magnetic, Insertion Paddle Wheel Flowmeter," Solar Engineering 1995, ASME/JSME International Solar Energy Conference, pp. 731-740, Maui, Hawaii, March 19-24, 1995.
29. M. A. Medina*, D. L. O'Neal, and W. D. Turner, "Development of a Transient Heat and Mass Transfer Model of residential Attics Used to Simulate Radiant Barrier Retrofits," Solar Engineering 1995, ASME/JSME International Solar Energy Conference, pp. 253-263, Maui, Hawaii, March 19-24, 1995.
30. M. Farzad* and D. L. O'Neal, "The Effect of Improper Refrigerant Charging on the Performance of a Residential Heat Pump with Fixed Expansion Devices (Capillary Tube and Short Orifices)," Proceedings of the 29th Intersociety Energy Conversion Engineering Conference, pp. 921-926, Monterey, California, August 7-11, 1994.
31. Y. Kim*, D. L. O'Neal, and X. Yuan, "Two -Phase Flow of R-134 and R-12 Through Short Tube Orifices," ASHRAE Transactions: Symposia, Volume 100, Part 2, pp. 582-591, June, 1994.
32. J. Robinson* and D. L. O'Neal, "The Impact of Charge on the Cooling Performance of an Air-to-Air Heat Pump for R-22 and Three Binary Blends of R-32 and R-134a," ASHRAE Transactions: Symposia, Volume 100, Part 2, pp. 529-537, June, 1994.
33. M. Medina*, D. L. O'Neal, and W. D. Turner, "Economic Evaluation of Insulation/Radiant Barrier Systems for the State of Texas," Proceedings of the Ninth Symposium on Improving Building Systems in Hot and Humid Climates, pp. 116-120, Arlington, Texas, May 19-20, 1994.
34. D. L. O'Neal, W. Aldred, and J. A. Gonzalez*, "A Simplified Procedure for Sizing Vertical Ground Coupled heat Pump Heat Exchangers for Residences in Texas," Proceedings of the Ninth Symposium on Improving Building Systems in Hot and Humid Climates, pp. 221-234, Arlington, Texas, May 19-20, 1994.

35. M. Dobson*, D. L. O'Neal, W. Aldred, and R. Margo*, "Field Performance of a Ground-Coupled Heat Pump in Abilene, Texas," Proceedings of the Ninth Symposium on Improving Building Systems in Hot and Humid Climates, pp. 235-243, Arlington, Texas, May 19-20, 1994.
36. W. V. Payne* and D. L. O'Neal, "The Effects of Outdoor Fan Airflow on the Frost/Defrost Performance of an Air Source Heat Pump," Heat Pump and Refrigeration Systems Design, Analysis and Applications, AES-Volume 29, ASME Winter Annual Meeting, New Orleans, Louisiana, November, 1993.
37. Y. Kim* and D. L. O'Neal, "An Experimental Study of Two-Phase Flow of HFC-134a Through Short Tube Orifices," Heat Pump and Refrigeration Systems Design, Analysis and Applications, AES-Volume 29, ASME Winter Annual Meeting, New Orleans, Louisiana, November, 1993.
38. W. V. Payne*, and D. L. O'Neal, "Defrost Cycle Performance for an Air Source Heat Pump With a Scroll and reciprocating Compressor," Proceedings of the 28th Intersociety Energy Conversion Engineering Conference, pp. 1.093-1.908, Atlanta, Georgia, August, 1993.
39. S. Kondepudi* and D. L. O'Neal, "A Simplified Model of Pin Fin Heat Exchange Under Frosting Conditions," ASHRAE Transactions: Symposia, Volume 99, Part 1, January, 1993.
40. W. V. Payne* and D. L. O'Neal, "Examination of Alternate Defrost Strategies for an Air-Source Heat Pump: Multi-Stage Defrost," Recent Research in Heat Pump Design, Analysis and Application, AES-Volume 28, pp. 71-77, ASME Winter Annual Meeting, Anaheim, California, November 9, 1992.
41. L. Neal and D. L. O'Neal, "The Impact of Residential Air Conditioner Charging and Sizing on Peak Electrical Demand," Proceedings of the ACEEE 1992 Summer Study Program, pp. 2.189-2.200, Santa Cruz, California, August 25-31, 1992.
42. M. Medina*, D. L. O'Neal, and W. D. Turner, "Effects of Radiant Barrier Systems on Ventilated Attics in a Hot and Humid Climate," Proceedings of the Eighth Symposium on Improving Building Systems in Hot and Humid Climates, pp. 47-52, Dallas, Texas, May 13-14, 1992.
43. M. Medina*, D. L. O'Neal, and W. D. Turner, "Radiant Barrier Performance During the Heating Season," Proceedings of the Eighth Symposium on Improving Building Systems in Hot and Humid Climates, pp. 53-58, Dallas, Texas, May 13-14, 1992.
44. M. Palani*, D. L. O'Neal, and J. S. Haberl, "The Effect of Reduced Evaporator Air Flow on the Performance of a Residential Central Air Conditioner," Proceedings of the Eighth Symposium on Improving Building Systems in Hot and Humid Climates, pp. 20-26, Dallas, Texas, May 13-14, 1992.
45. L. Neal and D. L. O'Neal, "The Impact of Residential Air Conditioner Charging and Sizing on Peak Electrical Demand," Proceedings of the Eighth Symposium on Improving Building Systems in Hot and Humid Climates, pp. 114-123, Dallas, Texas, May 13-14, 1992.
46. J. Bryant* and D. L. O'Neal, "Calibration of Relative Humidity Transducers Used in the LoanSTAR Program," Proceedings of the Eighth Symposium on Improving Building Systems in Hot and Humid Climates, pp. 229-233, Dallas, Texas, May 13-14, 1992.
47. D. L. O'Neal, J. Bryant*, and K. Boles, "Building Energy Instrumentation for Determining Retrofit Savings: Lessons Learned," Solar Engineering 1992, ASME/JSES/KSES International Solar Energy Conference, pp. 1263 - 1268, April 5-8, 1992, Maui, Hawaii.
48. M. K. Dobson*, D. L. O'Neal, and M. L. Wolfe, "A Non-dimensional Analysis of Vertical Configuration Ground-Coupled Heat Pump Start-up," Solar Engineering 1992, ASME/JSES/KSES International Solar Energy Conference, pp. 367-379, April 5-9, 1992, Maui, Hawaii.
49. J. Haberl, D. Bronson, S. Hinchey*, and D. O'Neal, "A Procedure for Calibrating the DOE-2 Simulation Program to Non-Weather Dependent Loads," ASHRAE Transactions: Symposia, Volume 98, Part 1, January, 1992.

50. S. Katipamula*, and D. O'Neal, "Transient Dehumidification Characteristics of a Heat Pump in Cooling Mode," Heat Pump Design, Analysis, and Application, ASME/AES, Volume 26, pp. 1-10, December 1-6, 1991, Atlanta, Georgia.
51. S. N. Kondepudi* and D. L. O'Neal, "Modeling Tube-Fin Heat Exchangers under Frosting Conditions," Proceedings of the XVIII International Congress of Refrigeration, August 10-17, 1991, Montreal, Canada.
52. D. L. O'Neal and K. T. Peterson*, "The Effect of Thermal Expansion Valve Speed on the Transient Response of an Air-Source Heat Pump during the Reverse Cycle Defrost," Proceedings of the XVIII International Congress of Refrigeration, August 10-17, 1991, Montreal, Canada.
53. D. L. O'Neal and J. A. Bryant*, "Metering and Calibration in LoanSTAR Buildings," Proceedings of the Seventh Symposium on Improving Building Systems in Hot and Humid Climates, Fort Worth, Texas, October 9-10, 1990.
54. S. Kondepudi* and D. O'Neal, "Performance of Finned-Tube Heat Exchangers under Frosting Conditions," ASHRAE Transactions: Symposia, Volume 96, Part 2, June, 1990.
55. M. Verdict, J. Haberl, D. Claridge, D. O'Neal, W. Heffington, and W. D. Turner, "Monitoring $98 Million in Energy Efficiency Retrofits: The Texas LoanSTAR Program," Proceedings of the ACEEE 1990 Summer Study Program, August 29-31, 1990, Santa Cruz, California.
56. S. N. Kondepudi* and D. L. O'Neal, "The Performance of Finned Tube Heat Exchangers Under Frosting Conditions," Collected Papers in Heat Transfer, HTD-Volume 123, ASME Winter Annual Meeting, San Francisco, California, December 10-14, 1989.
57. W. D. Turner, A. R. McFarland, D. L. O'Neal and M. G. Glass, "Modeling of Airflow in Very Large Ducts," Paper No. 89-FE-3, ASCE/ASME Mechanics, Fluid Engineering, and Biomechanics Conference, San Diego, California, July 9-11, 1989.
58. S. N. Kondepudi* and D. L. O'Neal, "The Effects of Frost Formation on the Thermal Performance of Finned Tube Heat Exchangers," AIAA/ASME Thermophysics and Heat Transfer Conference, Buffalo, New York, June 12-15, 1989.
59. S. Katipamula*, D. O'Neal, and S. Somasundaram, "Simulation of Dehumidification Characteristics of High Efficiency Residential Central Air-Conditioners in Hot and Humid Climates," Proceedings of the Fifth Annual Symposium on Improving Building Energy Efficiency in Hot and Humid Climates," Houston, Texas, September 13-14, 1988.
60. D. L. O'Neal, "The Application of Microcomputer Spreadsheets for Solving Numerical Heat Conduction Problems," ASHRAE Transactions, NT-87-08-4, Volume 93, Part 2, pp. 1347-1361, 1987.
61. D. L. O'Neal and S. Kondepudi*, "Demonstrating HVAC System Performance through System Simulation," ASHRAE Transactions, PO-86-03, Volume 92, Part 2, 1986.
62. S. Katipamula* and D. L. O'Neal, "An Evaluation of the Placement of Radiant Barriers on Their Effectiveness in Reducing Heat Transfer in Attics," Proceedings of the Third Annual Symposium on Improving Building Energy Efficiency in Hot and Humid Climates, Arlington, Texas, November 18-19, 1986.
63. S. Katipamula*, D. L. O'Neal and M. Farzad, "A Computer Analysis of Energy Use and Energy Conservation Options for a Twelve Story Office Building in Austin, Texas," Proceedings of the Third Annual Symposium on Improving Building Energy Efficiency in Hot and Humid Climates, Arlington, Texas, November 18-19, 1986.
64. W. E. Murphy, W. D. Turner, D. L. O'Neal and S. Seshan, "Trends in Building Energy Usage in Texas State Agencies," Improving Building Energy Efficiency in Hot and Humid Climates, Proceedings of the Second Annual Building Energy Symposium, College Station, Texas, September 24-26, 1985.

65. S. Katipamula*, W. D. Turner, W. E. Murphy and D. L. O'Neal, "Influence of Infrared Radiation on Attic Heat Transfer," Improving Building Energy Efficiency in Hot and Humid Climates, Proceedings of the Second Annual Building Energy Symposium, College Station, Texas, September 24-26, 1985.
66. D. L. O'Neal and D. Tree, "Frost Growth and Heat Transfer in a Parallel Plate Geometry," Paper No. 84-WA/HT-107, ASME Winter Annual Meeting, New Orleans, Louisiana, December, 1984.
67. F. Zehr and D. L. O'Neal, "Characterization of Representative Air and Liquid-Type Collectors for Solar Economic Analysis in Residences," Solar Engineering-1984, Proceedings of the ASME Solar Energy Division Sixth Annual Conference, Las Vegas, Nevada, April, 1984.
68. D. L. O'Neal and D. Tree, "Experimental Measurement of Frost Thickness on a Flat Plate," Proceedings of the XVI Congress on Refrigeration International Institute of Refrigeration, Paris, France, September, 1983.
69. J. K. Martin and D. L. O'Neal, "An Energy and Cost Analysis of Residential Heat Pumps in Northern Climates," Proceedings of the 15th Intersociety Energy Conversion Engineering Conference, Seattle, Washington, August, 1980.
70. S. Cohn, R. Perry and D. L. O'Neal, "An Interfuel Substitution Model for Institutions of Higher Education," Annual Eastern Economic Association Conference, Montreal, Canada, May, 1980.
71. D. L. O'Neal, "Residential Space Heating Systems: Energy Conservation and Economics," Proceedings of the 1979 National Conference on Technology for Energy Conservation, Tucson, Arizona, January, 1979.
72. E. Hirst and D. L. O'Neal, "Contributions of Improved Technologies to Reduced Energy Growth," Paper 78374, Proceedings of the 13th Intersociety Energy Conversion Engineering Conference, San Diego, California, August, 1978.
73. D. L. O'Neal and G. E. Maroney, "An Analysis of Four Methods for Measuring Pump Fluid-borne Noise Generation Potential," Proceedings of the 33rd National Conference on Fluid Power, Volume XXXI, October, 1977.
74. G. E. Maroney and D. L. O'Neal, "Hydrostatic Transmission Noise Abatement," Paper 770560, Earthmoving Industry Conference, Society of Automotive Engineers, Peoria, Illinois, April, 1977.
75. D. L. O'Neal and G. E. Maroney, "Performance Evaluation of Fluid-borne Noise Attenuators," Proceedings of the 32nd National Conference on Fluid Power, Volume XXX, October, 1976.

Conference Proceedings Editorships:

1. R. Hogan, Y.Kim, S. Kleis, D. O'Neal, and T. Tanaka, Proceedings of Renewable and Advanced Energy Systems for the 21st Century, Joint ASME, KSME, ASHRAE, JSME, SAREK, and JSES conference, Maui, Hawaii, April 11-15, 1999.
2. R.R. Bittle, K. Herold, A.B. Duncan, D.W. Nutter, J. Fiszdon, D. O'Neal, S. Garimella, and S. Prasad, Editus, Proceeding of the ASME Advanced Energy Systems Division, AES-Vol. 36, ASME International Mechanical Engineering Congress and Exposition, Atlanta, Georgia, Nov. 1996.
3. D. L. O'Neal, K. E. Herold, B. G. Prasad, R. Bittle and D. Nutter, Editors, Heat Pump and Refrigeration Systems Design, Analysis and Applications -1995, AES - Vol. 34, ASME International Mechanical Engineering Congress and Exposition, San Francisco, California, November, 1995.
4. D. L. O'Neal, Editor, Proceedings of the Fourth Annual Symposium on Improving Building Energy Efficiency in Hot and Humid Climates, Texas A&M University, September, 1987.
5. D. L. O'Neal, Editor, Proceedings of the Third Annual Symposium on Improving Building Energy Efficiency in Hot and Humid Climates, Texas A&M University, November, 1986.

Other Conference Publications:

1. D. L. O'Neal and J. Yang, "Effect of Fin Staging on the Frost/Defrost Performance of Heat Pump Evaporators", Proceedings of the HARFKO 2005 International Symposium, Seoul, South Korea, May 26, 2005.
2. D.L. O'Neal, J.A. Bryant, and B. Parker, "Impact of a Hydrophobic Coating on the Frost Buildup and Defrost Performance of a Heat Pump Evaporator", Proceedings of the 45th Oji International Seminar, New Approach Toward Low-Temperature Thermal Engineering Without Fluorocarbon Refrigerants, pp. 181-188, Tomakomai City, Hokkaido, Japan, Sept. 1997.
3. X. Yuan and D. L. O'Neal, "Development of a Transient Simulation Model of a Freezer, Part I: Model Development," Proceedings of the Fifth International Refrigeration Conference, West Lafayette, Indiana, July 19-22, 1994.
4. X. Yuan and D. L. O'Neal, "Development of a Transient Simulation Model of a Freezer, Part II: Experimental Data with Model," Proceedings of the Fifth International Refrigeration Conference, West Lafayette, Indiana, July 19-22, 1994.
5. D. L. O'Neal, J. Bryant, C. Boecker, and C. Bohmer, "Instrumenting Buildings to Determine Retrofit Savings: Murphy's Law Revisited," Proceedings of the 15th Industrial Energy Technology Conference, pp. 244-252, Houston, Texas, March 24-25, 1993.
6. C. Boecker, K. Boles, K., D. L. O'Neal, and J. Bryant, "Buildings Energy Instrumentation for Determining Retrofit Savings: Thermal and Flow Meter Equipment Selection," Seminar Notes, 8th Annual Symposium on Improving Building Systems in Hot and Humid Climates, Dallas, Texas, May 13-14, 1992.
7. D. L. O'Neal, "Engineering Analysis of Energy Savings Opportunities in Commercial Buildings," Proceedings of the Second Commercial Energy Modeling Forum, Chapel Hill, North Carolina, December 3-4, 1990.
8. D. L. O'Neal, M. Dobson, A. J. Finnin, M. L. Wolfe, and W. Alfred, "Remote Monitoring of a Ground-Coupled Heat Pump," Proceedings of the Second Annual Conference on End-Use Load Information and Its Role in DSM," Irvine, California, July 11-13, 1990.
9. D. L. O'Neal and A. J. Finnin," Energy Monitoring - Texas State Retrofit Demonstration Program," Proceedings of the Southeast Regional Association of Edison Illuminating Companies Load Research Conference, Houston, Texas, August 16-18, 1989.
10. W. E. Murphy, W. D. Turner, D. L. O'Neal, J. N. Bolander, and S. Seshan, "Cogeneration Opportunities in Texas State Agencies," Proceedings of the Seventh Annual Industrial Energy Technology Conference and Exhibition, pp. 12-15, Houston, Texas, May 12-15, 1985.
11. S. Somasundaram, W. D. Turner, W. E. Murphy, D. L. O'Neal and W. M. Heffington, "Energy Management Program at Texas A&M University," Computer Aided Engineering, Proceedings of the 1985 ASEE Annual Conference, pp. 363-368, Atlanta, Georgia, June 16-20, 1985.
12. W. E. Murphy, D. L. O'Neal, et al., "Energy Management Degree Specialization at Texas A & M University," Proceedings of the Sixth Annual Industrial Energy Conservation Technology Conference, Houston, Texas, April, 1984.
13. D. L. O'Neal and T. Vineyard, "The Oak Ridge National Laboratory's Residential Energy Use Model: Version 7.1," Proceedings of the Electric Power Research Institute's Energy Use Modeling and Conservation Analysis Conference, Atlanta, Georgia, November, 1980.
14. M. Levine, D. L. O'Neal, et al., "Consumer Decision Making and Energy Conservation in Residences," Proceedings of the International Conference on Consumer Behavior and Energy Use, Banff, Alberta, Canada, September, 1980.

15. D. L. O'Neal, E. Hirst, J. Carney and V. Haynes, "The Energy and Economic Effects of Residential Heat Pump Water Heaters," Proceedings of the 1979 National Conference on Technology for Energy Conservation, Tucson, Arizona, January, 1979.
16. D. L. O'Neal and G. E. Maroney, "Measuring Pump Fluid-borne Noise Generation Potential," BFPR Journal, Volume 11, No. 2, May, 1978, pp. 235-242.
17. D. L. O'Neal and G. E. Maroney, "A Computer-Aided Stationary Transducer Fluid-borne Noise Measurement Technique," BFPR Journal, Volume 11, No. 1, January, 1978, pp. 31-40.
18. R. K. King and D. L. O'Neal, "Improving Component Fatigue Life Through Pressure Ripple Reduction," Paper No. P76-54, Annual Report No. 10, Basic Fluid Power Research Program, Fluid Power Research Center, Oklahoma State University, Stillwater, Oklahoma, October, 1976.
19. D. L. O'Neal and G. E. Maroney, "Evaluating the Fluid-borne Noise Potential of Hydraulic Pumps," Paper No. P76-58, Annual Report No. 10, Basic Fluid Power Research Program, Fluid Power Research Center, Oklahoma State University, Stillwater, Oklahoma, October, 1976.
20. D. L. O'Neal and G. Maroney, "Performance Evaluation of Fluid-borne Noise Attenuators," Paper No. P76-57, Annual Report No. 10, Basic Fluid Power Research Program, Fluid Power Research Center, Oklahoma State University, October, 1976.
21. T. G. Snyder and D. L. O'Neal, "An Engineering Approach to the Selection of Vibration Isolators," Paper No. P75-53, Annual Report No. 9, Basic Fluid Power Research Program, Fluid Power Research Center, Oklahoma State University, Stillwater, Oklahoma, October, 1975.
22. D. L. O'Neal and G. E. Maroney, "Vibration Isolation - Do You Need It?" Paper No. P75-52, Annual Report No. 9, Basic Fluid Power Research Program, Fluid Power Research Center, Oklahoma State University, Stillwater, Oklahoma, October, 1975.
23. D. L. O'Neal and G. E. Maroney, "An Investigation of Turbine Flowmeter Containment Sensitivity," Paper No. P75-44, Annual Report No. 9, Basic Fluid Power Research Program, Fluid Power Research Center, Oklahoma State University, Stillwater, Oklahoma, 1975.

Popular Articles:

1. D. E. Claridge, J. S. Haberl, W. D. Turner, and D. O'Neal, "Energy Retrofits Can Cut Energy Use and Costs," Mechanical Engineering, Volume 116, No. 8, pp. 64-67, August, 1994.
2. K. Den Braven, K. Herold, V. Mei, D. O'Neal, and S. Penoncello, "Recent Advances in Heat Pump and Air Conditioning Technologies," Mechanical Engineering, Volume 115, No. 9, pp. 98-102, September, 1993.
3. J. Haberl, D. Bronson, S. Hinchey, and D. L. O'Neal, "Graphical Tools to Help Calibrate DOE-2 Simulation Program," ASHRAE Journal, Volume 35, No. 1, pp. 27-32, January, 1993.
4. D. Claridge, J. Haberl, W. Turner, D. O'Neal, et al., "Improving Energy Conservation Retrofits with Measured Energy Savings," ASHRAE Journal, October, 1991.
5. D. L. O'Neal and S. Kondepudi, "Simulating HVAC System Performance on Microcomputers," Consulting-Specifying Engineer, pp. 80-84, September, 1987.
6. W. E. Murphy, W. D. Turner and D. L. O'Neal, "Understanding Air Conditioner Ratings," Texas Apartments, Volume 7, No. 1, pp. 28-29, Winter, 1984-85.

Technical Reports:

1. D. L O'Neal, C. Reid, D. Ingram, D. Lu, J.A. Bryant, S. Gupta, B. Kanan, S. Bryant, and P.Yin, "Developing Fan Power Terminal Unit Performance Data and Models Compatible with EnergyPlus" Report No. 8012, to the Air-Conditioning, Heating, and Refrigeration Institute, Arlington, Virginia, November 2016.

2. J. Edmondson, D. L. O'Neal, J. A. Bryant, and M.A. Davis, "Performance of ECM Controlled Fan-Powered Terminal Units", Final Report of the Variable Air Volume Research Consortium, Texas Engineering Experiment Station, College Station, TX, May 2011.
3. M. Davis, J. Bryant, D. O'Neal, A. Hervey, and A. Cramlet, "Comparison of the Total Energy Consumption of Series Versus Parallel Fan Powered VAV Terminal Units", Final Report, Part 2, to the American Society of Heating, Ventilating, and Air Conditioning Engineers, Atlanta, Georgia, June, 2007.
4. J. Furr, D. O'Neal, M. Davis, J. Bryant, and A. Cramlet, "Development of Models for Series and Parallel Fan Variable Air Volume Terminal Units", Final Report to the American Society of Heating, Ventilating, and Air Conditioning Engineers, Atlanta, Georgia, January 2007.
5. M. Davis, D. O'Neal, and B. Dooley, "Performance of Systems with Plate and Spine Fin Condensers after Contamination and Cleaning", Final Report to the Trane Company, Tyler, Texas, May 2005.
6. T. Kim, C. Ortiz, D. O'Neal, and A. McFarland, "Application of Single Point Representative Air Sampling in the TEF Stack of the Savannah River Site", 6712/12/16/02, Final Report to Westinghouse Savannah River Company, Aiken, SC, December 2002.
7. T. Kim, C. Ortiz, D. O'Neal, and A. McFarland, "Main Stack Sampling for the Mixed Oxide Fuel Fabrication Facility (MFFF), 6595/10/31/02, Final Report to Duke, Cogema, Stone and Webster, Charlotte, NC, October 2002.
8. T. Kim, C. Ortiz, D. O'Neal, and A. McFarland, "Development of Criteria for Single Point Representative Air Sampling at WIPP Effluent Air Station C", 6560/08/30/TK, Final Report to Westinghouse TRU Solutions, LLC, Carlsbad, NM, August 2002.
9. D. O'Neal and J. Nakos, "Comparison of MELTER with 2d COYOTE Finite Element Models of the SST and 9516 Cargo", Sandia National Laboratories Technical Report, August 2001.
10. S. Chandra, A. McFarland, R. Watters, D. O'Neal, and C. Ortiz, "Selection and Qualification of Suitable Locations for Underground Sampling of WIPP Effluent Air, Part II: E240/S400", Final Report to Westinghouse Government Environmental Services Company, August 2000.
11. D. L. O'Neal and J.A. Bryant, "Review of State-of-the-Art for Heat Pumps used in Ventilation Air Applications", Energy Systems Laboratory, Texas A&M University, December 1998.
12. S. A. Fitzhenry, W.Vance Payne, and D. L. O'Neal, "Effect of Lubricant Contamination on the Performance and Reliability of Heat Pumps Charged with R-407c", EPA-600/R-98-015, U.S. Environmental Protection Agency, Office of Research and Development, Washington, D.C., February, 1998.
13. D. C. Tootle, D. L. O'Neal, and K. Anammalai, "Evaluation of the Performance and Emissions of a Gas-Fired Engine-Driven Heat Pump", Energy Systems Laboratory, Texas A&M Univesity, December 1997.
14. M.C. Chavez, D.L. O'Neal, A. McFarland, and C. Ortiz, "An Analysis of Salt Deposition on the Performance of the WIPP Station A Air Sampling System", Final Report to Westinghouse Corporation, Energy Systems Laboratory, Texas A&M University, August 1997.
15. D. L. O'Neal, T. A. Reddy and B. Sucher, "Assessment and Suggestions to Improve The Commercial Building Module of EIA-NEMS", ESL-TR-96/01, Energy Systems Laboratory, Texas A&M University, October, 1996.
16. D. L. O'Neal, "Modeling of the Defrost Cycle of Heat Pumps: A Literature Review", Energy Systems Laboratory, Texas A&M University, August, 1996.
17. D. L. O'Neal, Y. Gong and M. Davis, "A Study of Heat Exchanger Performance under Frosting Conditions", ESL-TR-96/01-LG, Energy Systems Laboratory, Texas A&M University, June 1996.
18. G. Weaver, D. L. O'Neal, A. McFarland and C. Ortiz, "Analysis of Salt and Moisture on the Air Sampling Probes at the Waste Isolation Pilot Plant", ESL'TR-W2, Energy Systems Laboratory, April 1996.

19. J. Bain, D. L. O'neal, M. A. Davis and A. G. Rodriguez, "The Effect of Hardware Configuration on the Performance of Residential Air Conditioning Systems at High Outdoor Ambient Temperatures," Energy Systems Laboratory, Texas A&M University, December, 1995.
20. A. Rodriguez, D. L. O'Neal, M. A. Davis and J. Bain, "The Effect of Refrigerant Charge, Duct Leakage, and Evaporation Airflow on the High Temperature Performance of Air Conditioners and Heat Pumps," Energy Systems Laboratory, Texas A&M University, December, 1995.
21. W. V. Payne and D. L. O'Neal, "Two-Phase Flow of Two HFC Refrigerant Mixtures through Short Tube Orifices," ESL TR-94/12-12, Energy Systems Laboratory, Texas A&M University, September, 1995.
22. D. L. O'Neal and M. A. Davis, "Testing and Economic Evaluation of a High Efficiency 10 Ton Rooftop Air Conditioner," Energy Systems Laboratory, Texas A&M University, September, 1995.
23. B. Parker and D. L. O'Neal, "The Effects of Hydrophobic Coatings on the Frost/Defrost Performance of an Air Source Heat Pump," ESL-TR-94/12-13, Energy Systems Laboratory, Texas A&M University, December, 1994.
24. Y. Kim, W. V. Payne, and D. O'Neal, "Two-Phase Flow of R-22 through Flexible Short-Tube Orifices," ESL/TR-94/CA-01, Energy Systems Laboratory, Texas A&M University, February, 1994.
25. Y. Kim, W. V. Payne, and D. O'Neal, "Two-Phase Flow of Refrigerant Mixtures through Short-Tube Orifices," ESL/TR-93/CA-01, Energy Systems Laboratory, Texas A&M University, December, 1993.
26. M. Farzad, M. Dobson, and D. O'Neal, "An Evaluation of a Liquid Refrigerant Pump on an Air Conditioner," Energy Systems Laboratory, Texas A&M University, September, 1991.
27. D. E. Claridge, J. Haberl, W. Heffington, D. O'Neal, et al, "Texas LoanSTAR Monitoring and Analysis Program Draft Plan," Energy Systems Laboratory, Texas A&M University, December, 1989.
28. M. Farzad and D. O'Neal, "An Evaluation of Improper Refrigerant Charge on the Performance of a Split System Air Conditioner with a Thermal Expansion Valve," ESL/CON/89-1, Energy Systems Laboratory, Texas A&M Univ., 1989.
29. D. L. O'Neal, C. J. Ramsey and M. Farzad, "An Evaluation of the Effects of Refrigerant Charge on a Residential Central Air Conditioner with Orifice Expansion," ESL/89-06, Energy Systems Laboratory, Texas A&M Univ., March, 1989.
30. D. L. O'Neal, N. K. Anand, K. T. Peterson, and S. Schliesing, "Determination of the Transient Response Characteristics of the Air-Source Heat Pump During the Reverse Cycle Defrost," Final Report, ASHRAE Project 479-TRP, ESL/88-05R, Energy Systems Laboratory, Texas A&M University, January, 1989.
31. S. Katipamula and D. L. O'Neal, "Energy Use and Design Options for Texas State Buildings," ESL/88-08, Energy Systems Laboratory, Texas A&M University, November, 1988.
32. D. L. O'Neal and S. B. Penson, "An Analysis of Efficiency Improvements in Room Air Conditioners," ESL/88-04, Energy Systems Laboratory, Texas A&M University, October, 1988.
33. W. D. Turner, A. R. McFarland, M. G. Glass, C. A. Ortiz, D. L. O'Neal, et al., "Tests of Model Waste Isolation Pilot Plant Site Exhaust Airflow Systems," DOE/WIPP-88-024, Energy Systems Laboratory, Texas A&M University, September, 1988.
34. M. Farzad and D. O'Neal, "An Evaluation of Improper Refrigerant Charge on the Performance of a Split System Air Conditioner with Capillary Tube Expansion," ESL/CON/88-1, Energy Systems Laboratory, Texas A&M University, July, 1988.
35. S. Katipamula, D. L. O'Neal, and S. Somasundaram, "Determination of the Transient Dehumidification Characteristics of High Efficiency Central Air Conditioners," ESL/87-04, Energy Systems Laboratory, Mechanical Engineering Department, Texas A&M University, August, 1987.
36. D. L. O'Neal, N. Chan, S. Somasundaram, and S. Katipamula, "An Evaluation of Steady-State Dehumidification Characteristics of Residential Central Air Conditioners," ESL/87-03, Energy Systems Laboratory, Mechanical Engineering Department, Texas A&M University, August, 1987.

37. D. L. O'Neal, C. L. Boecker and S. Penson, "An Analysis Efficiency Improvements in Residential Sized Heat Pumps and Central Air Conditioners," ESL/86-08, Energy Systems Laboratory, Mechanical Engineering Department, Texas A&M University, March, 1987.
38. M. Farzad and D. L. O'Neal, "Energy Analysis and Energy Conservation Options for the Warehouse Facility at the Human Services Center Complex," ESL/86-09, Department of Mechanical Engineering, Texas A&M University, April, 1987.
39. S. Katipamula and D. L. O'Neal, "An Energy and Peak Loads Analysis of the TYC/TRC Building," ESL/86-07, Department of Mechanical Engineering, Texas A&M University, March, 1987.
40. M. Fazard and D. L. O'Neal, "Energy Analysis and Energy Conservation Options for the Addition to Records Storage Building," ESL/86-06, Energy Systems Laboratory, Department of Mechanical Engineering, Texas A&M University, November, 1986.
41. S. Katipamula and D. L. O'Neal, "An Energy and Peak Loads Analysis of the Texas Department of Health Building," ESL/86-05, Energy Systems Laboratory, Department of Mechanical Engineering, Texas A&M University, October, 1986.
42. M. Farzad and D. L. O'Neal, "Energy Analysis and Energy Conservation Options for the Supreme Court and Attorney General Buildings," ESL/86-04, Energy Systems Laboratory, Department of Mechanical Engineering, Texas A&M University, October, 1986.
43. S. Katipamula, D. L. O'Neal and M. Farzad, "Analysis of Energy Use and Energy Conservation Options for the Travis Building," ESL/86-03, Energy Systems Laboratory, Department of Mechanical Engineering, Texas A&M University, August, 1986.
44. D. L. O'Neal and K. Rothbauer, "The Databook of Energy Use and Costs in Texas State Agencies," ESL/86-01, Energy Systems Laboratory, Department of Mechanical Engineering, Texas A&M University, July, 1986.
45. D. L. O'Neal, C. Boecker, W. E. Murphy and J. R. Notman, "An Analysis of Efficiency Improvements in Residential Sized Heat Pumps," ESL/85-24, Energy Systems Laboratory, Department of Mechanical Engineering, Texas A&M University, May, 1986.
46. D. L. O'Neal (ed.), "The Appliance Standards Analysis: An Evaluation and Recommendations," Final Report of the Appliance Standards Analysis Review Group, Lawrence Berkeley Laboratory, University of California, Berkeley, July, 1985.
47. D. L. O'Neal, N. H. Cohen, D. W. Schrock, "Development of a Residential Energy Use Model for the City of Austin Electric Utility," ESL-03, Energy Systems Laboratory, Texas A&M University, January, 1985.
48. W. D. Turner, D. L. O'Neal, W. E. Murphy and S. T. Subramanian, "Reducing Energy Costs in the Texas State Agencies: Conservation and Policy Options," Energy Systems Laboratory, Texas A & M University, August, 1984.
49. D. L. O'Neal, "The Effect of Frost Formation on the Performance of a Parallel Plate Heat Exchange," Ph.D. Thesis, Purdue University, December, 1982.
50. F. Zehr, T. Vineyard, R. Barnes and D. L. O'Neal, "The Performance and Economics of Residential Solar Space Heating," Oak Ridge National Laboratory, ORNL/CON-63, November, 1982.
51. D. L. O'Neal and J. Jones, An Energy and Economic Evaluation of the Single-Family Residential Building Energy Performance Standards," Oak Ridge National Laboratory, ORNL/CON-57, November, 1981.
52. D. L. O'Neal, K. R. Corum and J. Jones, "An Estimate of Consumer Discount Rates Implicit in Single-Family Housing Construction Practices," Oak Ridge National Laboratory, ORNL/CON-62, April, 1981.
53. D. L. O'Neal, "Energy Consumption in the Residential Sector: An Historical Analysis," Final Report, Subcontract CA-0203-1, Solar Energy Research Institute, Golden, Colorado, September, 1980.

54. D. L. O'Neal, "Energy Use in the Residential Sector: An Examination of Four Possible Future," Subcontract CA-0215-1, Solar Energy Research Institute, Golden, Colorado, September, 1980.
55. D. L. O'Neal, J. Carney and E. Hirst, "Regional Analysis of Residential Water Heating Options: Energy Use and Economics," Oak Ridge National Laboratory, ORNL/CON-31, October, 1978.
56. D. L. O'Neal, "Energy and Cost Analysis of Residential Heating Systems," Oak Ridge National Laboratory, ORNL/CON-25, Oak Ridge, Tennessee, July, 1978.
57. D. L. O'Neal, "Computer Simulation and Thermal Efficiency Optimization of the Oklahoma State University Power Plant," Report for Master of Science Degree, School of Mechanical and Aerospace Engineering, Oklahoma State University, Stillwater, Oklahoma, May, 1977.
58. D. L. O'Neal, J. Parker and F. McQuiston, "Oklahoma State University Power Plant Study - Phase II," Engineering Energy Laboratory, Oklahoma State University, Stillwater, Oklahoma, January, 1977.
59. G. E. Maroney and D. L. O'Neal, "Hydraulic Noise Attenuation, Section I," MERADCOM/OSU Hydraulic System Reliability Program Annual Report, Fluid Power Research Center, Oklahoma State University, Stillwater, Oklahoma, January, 1977.
60. D. L. O'Neal, A. Ghajar, and J. Parker, "Oklahoma State University Power Plant Study," Engineering Energy Laboratory, Oklahoma State University, Stillwater, Oklahoma, August, 1975.
61. G. E. Maroney, D. L. O'Neal, et al., "Hydraulic Noise, Section II, MERADCOM/OSU Hydraulic System Reliability Program Annual Report," Fluid Power Research Center, Oklahoma State University, Stillwater, Oklahoma, Stillwater, Oklahoma, January, 1976.
62. G. E. Maroney, D. L. O'Neal, et al., "Caterpillar Fluid-borne Noise Study-Final Report," Fluid Power Research Center, Oklahoma State University, Stillwater, Oklahoma, May, 1975.

Invited Seminar Lectures:

1. "Refrigerant Flow Through Short-Tube Orifices," Invited Seminar, Baylor University, Waco, TX, January 19, 2012
2. "The Transient Response of Thin-Film Capacitive Relative Humidity Sensors", Texas A&M University at Qatar, Doha, Qatar, March 9, 2009.
3. "Effect of Fin Staging on the Frost/Defrost Performance of Heat Pump Evaporators", HARFKO 2005 International Symposium, Seoul, Korea, May 26, 2005.
4. "Refrigerant Flow Through Short-Tube Orifices," Invited Seminar, Sandia National Laboratory, Albuquerque, New Mexico, November 22, 1999.
5. "Impact of a Hydrophobic Coating on the Frost Buildup and Defrost Performance of a Heat Pump Evaporator", Invited seminar at Universidad de Guanajuato, Guanajuato, Mexico, May 17, 1999.
6. "Refrigerant Flow Through Short-Tube Orifices," Invited Seminar, Purdue University, West Lafayette, Indiana, February 23, 1999.
7. "Thermodynamics in the Sophomore Year Curriculum", Presentation to engineering faculty at Michigan Tech University, Houghton, Michigan, December 11, 1998.
8. "Role of Technical Committees in ASHRAE", ASHRAE Regional VIII Meeting, April 1998, Tulsa, OK.
9. "Impact of a Hydrophobic Coating on the Frost Buildup and Defrost Performance of a Heat Pump Evaporator", Invited paper at the 45th Oji International Seminar, Tomokomai, Hokkaido, Japan, September 19, 1997.
10. "Electrical Characteristics of Heat Pumps and Air Conditioners", Telog Instruments, Inc., Rochester, New York, April 26, 1996.
11. "Leakage in Return Air Ducts: The Overlooked Culprit in a Poor Residential Air Conditioner Performance in Hot/Humid Climates", Corpus Christi ASHRAE Chapter Meeting, April 9, 1996.

12. "Refrigeration System Dynamics During the Frost/Defrost Cycle of an Air Source Heat Pump", Texas A&M University, Kingsville, January 29, 1996.
13. "Refrigeration System Dynamics During the Frost/Defrost Cycle of an Air Source Heat Pump," Living System Laboratory, LG Electronics, Seoul, Korea, July 25, 1995.
14. "Refrigeration System Dynamics During the Frost/Defrost Cycle of an Air Source Heat Pump," Society of Air Conditioning and Refrigeration Engineers of Korea (SAREK), Seoul, Korea, July 26, 1995.
15. "Test Results for Flow of Two HFC Refrigerant Mixtures through Short Tube Orifices," Society of Air Conditioning and Refrigeration Engineers of Korea (SAREK), Seoul, Korea, July 26, 1995.
16. "Convective Evaporative Heat Transfer and Pressure Drop of a HFC-32HFC-12 Mixture," LG Electronics, Changwon, Korea, July 27, 1995.
17. "The Use of Hydrophobic Coatings on Heat Exchanger Surfaces," LG Electronics, Changwon, Korea, July 27, 1995.
18. "Modeling of the Performance of Ground Coupled Heat Pumps," Korea Institute of Construction Technology, Seoul, Korea, July 28, 1995.
19. "The Use of Hydrophobic Coatings on Heat Exchanger Surfaces," Living System Laboratory, LG Electronics, Seoul, Korea, July 29, 1995.
20. "Dehumidification Performance of Residential Sized Air Conditioners," Lower Colorado River Authority, Austin, Texas, December 4, 1994.
21. "Heat Pump Research at Texas A&M University," Invited Seminar, Baylor University ASME Chapter Meeting, Waco, Texas, October 6, 1994.
22. "Frost, Refrigerants, and Buildings: An Overview of HVAC Research at Texas A&M University," Invited Seminar, Houston Chapter of ASHRAE Meeting, September 28, 1993.
23. "Two-Phase Flow of Refrigerants through Short-Tube Orifices," Invited Seminar, Oak Ridge National Laboratory, Oak Ridge, Tennessee, August 4, 1993.
24. "Two-Phase Flow of Refrigerants Through Short-Tube Orifices," Invited Seminar, Department of Mechanical and Industrial Engineering, University of Illinois, Urbana, Illinois, January 27, 1993.
25. "Two-Phase Flow through Short-Tube Orifices," Invited Seminar, Department of Power Machinery, Xi'an Jiaotong University, Xi'an, China, May 27, 1992.
26. "Frost Growth on Heat Exchanger Surfaces," Invited Seminar, Department of Power Machinery, Xi'an Jiaotong University, Xi'an, China, May 26, 1992.
27. "Refrigeration System Dynamics During the Reverse Cycle Defrost," Invited Seminar, Department of Power Machinery, Xi'an Jiaotong University, Xi'an, China, May 26, 1992.
28. "Engineering Analysis of Energy Savings Opportunities in Commercial Buildings," Invited Presentation, Commercial Energy Modeling Forum, Chapel Hill, North Carolina, December 3, 1990.
29. "Measurement and Analysis of Energy Savings in State Owned Buildings: The LoanSTAR Monitoring and Analysis Program," Invited Presentation, Southwest Electrical Metering Association Meeting, Dallas, Texas, June 4, 1990.
30. "Radiant Barriers: Separating Myth from Reality," Invited Seminar, Central Power and Light Company, Corpus Christi, Texas, July 13, 1988.
31. "Energy Monitoring in the Texas State Retrofit Demonstration Program," Invited Presentation, Battelle Pacific Northwest Laboratory, Richland, Washington, June 30, 1988.

Other Presentations:

1. "Educating a Workforce in Alternative and Nuclear Energy", Panel Discussion, Alternative Energies – A Global Perspective, Young Engineers and Scientists Symposium, College Station, TX, Jan. 12, 2011.

2. "A Numerical Study of Pressure Distribution and Flow through Rigid Short-Tube Orifices" ASHRAE Annual Meeting, Atlantic City, NJ, January 16, 2002.
3. "Effect of Fin Staging on Frost/Defrost Performance of a Two-Row Heat Pump Evaporator under Heavy Frosting Conditions", ASHRAE Annual Meeting, Cincinnati, OH, June 26, 2001.
4. "Cooling Performance of Air Conditioners and Heat Pumps at High Outdoor Temperatures, ASHRAE Annual Meeting, Atlanta, Georgia, February 17, 1996.
5. "The Impact of Charge on the Cooling Performance of an Air-to-Air Heat Pump for R-22 and Three Binary Blends of R-32 and R-134a," ASHRAE Annual Meeting, Orlando, Florida, June 26, 1994.
6. "The Effect of Reduced Evaporation Air Flow on the Performance of a Residential Central Air Conditioner," Eighth Symposium of Improving Building Systems in Hot and Humid Climates, Dallas, Texas, May 14, 1992.
7. "The Impact of Residential Air Conditioner Charging and Sizing on Peak Load Demand," Eighth Symposium of Improving Building Systems in Hot and Humid Climates, Dallas, Texas, May 14, 1992.
8. "A Non-Dimensional Analysis of Vertical Configuration Ground-Coupled Heat Pump Start-up," ASME/JSES/KSES International Solar Energy Conference, Maui, Hawaii, April 9, 1992.
9. "Building Energy Instrumentation for Determining Retrofit Savings: Lessons Learned," ASME/JSES/KSES International Solar Energy Conference, Maui, Hawaii, April 9, 1992.
10. "Transient Dehumidification Characteristics of a Heat Pump in Cooling Mode," ASME Winter Annual Meeting, Atlanta, Georgia, December 2, 1991.
11. "The Effect of Thermal Expansion Valve Speed on the Transient Response of an Air-Source Heat Pump during the Reverse-Cycle Defrost," XVII International Congress of Refrigeration, Montreal, Canada, August, 15, 1991.
12. "Performance Degradation During On-Off Cycling of Single Speed Air Conditioners at Heat Pumps: Model Development and Analysis," ASHRAE Annual Meeting, Indianapolis, Indiana, June 24, 1991.
13. "Performance Degradation During On-Off Cycling of Single Speed Air Conditioners and Heat Pumps: Experimental Results," ASHRAE Annual Meeting, Indianapolis, Indiana, June 24, 1991.
14. "Metering and Calibration in LoanSTAR Buildings," ASME Winter Annual Meeting, Dallas, Texas, November 26, 1990.
15. "Cogeneration Feasibility Studies for State Agencies in Texas," ASHRAE Annual Meeting, St. Louis, Missouri, June 12, 1990.
16. "A Comparison of Orifice and TXV Control Characteristics during the Reverse Cycle Defrost," ASHRAE Winter Meeting, Atlanta, Georgia, February 13, 1990.
17. "Energy Monitoring - Texas State Retrofit Demonstration Program," Southeast Regional AEIC Load Research Conference, Houston, Texas, August 16, 1989.
18. "Effects of Outdoor Coil Fan Pre-Start on Pressure Transients during the Reverse Cycle Defrost of a Heat Pump," ASHRAE Annual Meeting, Vancouver, Canada, June 28, 1989.
19. "Refrigeration System Dynamics during the Reverse Cycle Defrost," ASHRAE Annual Meeting, Vancouver, Canada, June 28, 1989.
20. "Simulation of Dehumidification Characteristics of Residential Central Air Conditioners," ASHRAE Annual Meeting, Ottawa, Canada, June 29, 1988.
21. "Evaluation of Performance Degradation Due to Inlet Elbow Orientation on a Small Forward Curved Centrifugal Fan," ASHRAE Winter Meeting, Dallas, Texas, February 2, 1988.
22. "The Application of Microcomputer Spreadsheets for Solving Numerical Heat Conduction Problems," ASHRAE Annual Meeting, Nashville, Tennessee, June 21, 1987.

23. "Experimental Study of Heat Transfer in Attics With a Small Scale Simulator," ASHRAE Winter Annual Meeting, New York City, New York, January 19, 1987.
24. "Demonstrating HVAC System Performance through System Simulation," ASHRAE Annual Meeting, Portland, Oregon, June 22, 1986.
25. "A Review of Frost Formation in Simple Geometries," ASHRAE Annual Meeting, Honolulu, Hawaii, June 24, 1985.
26. "Frost Growth and Heat Transfer in a Parallel Plate Geometry," ASME Winter Annual Meeting, New Orleans, Louisiana, December 13, 1984.
27. "Measurement of Frost Growth and Density in a Parallel Plate Geometry," American Society of Heating, Refrigerating and Air Conditioning Engineers Annual Meeting, Kansas City, Missouri, June 20, 1984.
28. "Characterization of Representative Air and Liquid-Type Collectors for Solar Economic Analysis in Residences," ASME Solar Energy Division Sixth Annual Conference, Las Vegas, Nevada, April 9, 1984.
29. "The Oak Ridge National Laboratory's Residential Energy Use Model: Version 7.1," Electric Power Research Institute's Energy Use Modeling and Conservation Analysis Conference, Atlanta, Georgia, November, 1980.
30. "The Energy and Economic Effects of Residential Heat Pump Water Heaters," National Conference on Technology for Energy Conservation, Tucson, Arizona, January, 1979.
31. "Residential Space Heating Systems: Energy Conservation and Economics," National Conference on Technology for Energy Conservation, Tucson, Arizona, January, 1979.
32. "Contributions of Improved Technologies to Reduced Energy Growth," Paper 78374, 13th Intersociety Energy Conversion Engineering Conference, San Diego, California, August, 1978.
33. "The ORNL Residential Energy Use Model," Conference on Major Home Appliance Technology for Energy Conservation, Purdue University, West Lafayette, Indiana, February, 1978.
34. "An Analysis of Four Methods for Measuring Pump Fluid-borne Noise Generation Potential," 33rd National Conference on Fluid Power, October, 1977.
35. "Hydrostatic Transmission Noise Abatement," Earthmoving Industry Conference, Society of Automotive Engineers, Peoria, Illinois, April, 1977.
36. "Performance Evaluation of Fluid-borne Noise Attenuators," 32nd National Conference on Fluid Power, Volume XXX, October, 1976.
37. "The Use of Damping Materials for Pump Airborne Noise Reduction," Paper No. P76-61, 10th Annual Fluid Power Research Conference, Oklahoma State University, Stillwater, Oklahoma, October, 1976.
38. "Evaluating the Fluid-borne Noise Potential of Hydraulic Pumps," 10th Annual Fluid Power Research Conference, Oklahoma State University, Stillwater, Oklahoma, October, 1976.
39. "Performance Evaluation of Fluid-borne Noise Attenuators," Paper No. P76-57, 10th Annual Fluid Power Research Conference, Oklahoma State University, Stillwater, Oklahoma, October, 1975.
40. "An Investigation of Turbine Flowmeter Contaminant Sensitivity," 9th Annual Fluid Power Research Conference, Oklahoma State University, Stillwater, Oklahoma, October, 1975.

Research Programs:

a. State Funded Projects

1. "Metering and Monitoring Analysis Program", Funded by the State Energy Conservation Office, Co-PIs: W.D. Turner, D. Claridge, J. Haberl, and D. O'Neal, Sept. 2001-Aug. 2002, $261,000 (Approximately $55,000 is the direct responsibility of D. O'Neal).

2. “Metering and Monitoring Analysis Program”, Funded by the State Energy Conservation Office, Co-PIs: W.D. Turner, D. Claridge, J. Haberl, and D. O’Neal, Sept. 2000-Aug. 2001, $275,000 (Approximately $85,000 was the direct responsibility of D. O’Neal). Supports one graduate student.
3. “Metering and Monitoring Analysis Program”, Funded by the State Energy Conservation Office, Co-PIs: W.D. Turner, D. Claridge, J. Haberl, and D. O’Neal, Sept. 1998-Aug. 1999, $450,000 (Approximately $95,000 was the direct responsibility of D. O’Neal). Supports one and a half graduate student.
4. “Commissioning Contract with Texas Tech University”, Funded by Texas Tech University, Co-PIs: D. Claridge, J. Haberl, L. Mingsheng, and D. O’Neal, July 1998-June 2001, $122,000 (Approximately $15,000 was the direct responsibility of D. O’Neal).
5. "Metering and Monitoring Analysis Program", funded by the State Energy Conservation Office, Co-PIs: W.D. Turner, D. Claridge, J. Haberl, and D. O'Neal, Sept. 1997-Aug. 1998, $350,000 (Approximately $75,000 was the direct responsibility of D. O'Neal).
6. “Metering and Monitoring Analysis Program”, funded by the State Energy Conservation Office, Co-Principal Investigators: W. D. Turner, J. Haberl, D. Claridge and D. O’Neal, September, 1996 - August, 1997, $1,700,167 ($130,000 was the direct responsibility of D. O’Neal).
7. “Metering and Monitoring Analysis Program”, funded by the State Energy Conservation Office, Co-Principal Investigators: W. D. Turner, J. Haberl, D. Claridge and D. O’Neal, September, 1995 - August, 1996, $1,368,939 ($135,871 was the direct responsibility of D. O’Neal).
8. “Energy Efficient Building Design Assistance Program”, funded by the Texas Department of Criminal Justice, Co-Principal Investigators: D. O’Neal, D. Claridge, W. D. Turner and J. Haberl, December, 1994 - March, 1996, $174,634.
9. “The LoanSTAR Monitoring and Analysis Program”, funded by the State Energy Conservation Office, Co-Principal Investigators: W. D. Turner, J. Haberl, D. Claridge and D. O’Neal, June, 1994 - August, 1995, $1,503,541 ($190,000 was the direct responsibility of D. O’Neal).
10. “The Metering and Monitoring Analysis Program,” funded by the Texas Energy Conservation Office, Co-Principal Investigators: W. D. Turner, J. Haberl, D. Claridge, and D. O. O’Neal, one graduate student supported, December 1992 - May 1994, $1,729,594 ($165,188 was the direct responsibility of D. O’Neal).
11. Co-Principal Investigator, “The LoanSTAR Monitoring and Analysis Program,” funded by the Governor’s Energy Office, 9/91 - 8/92, $1,932,000 ($233,818 was the direct responsibility of D. O’Neal).
12. Principal Investigator, “Improving the Defrost Performance of Air-to-Air Heat Pumps,” funded by the Energy Research and Applications Program, 1/91 - 7/93, $215,820.
13. Co-Principal Investigator, “The LoanSTAR Monitoring and Analysis Program,” funded by the Governor’s Energy Office, 9/90-8/91, $1,934,000 ($154,508 was the direct responsibility of D. O’Neal).
14. Principal Investigator, “Characterization of Two-Phase Flow through Short-Tube Orifices For Advanced Refrigerants,” funded by the Texas Advanced Technology Program, 1/90 - 12/91, $60,000.
15. Co-Principal Investigator, “Transport Properties of Advanced Non-CFC Refrigerants,” funded by the Texas Advanced Technology Program, 1/90 - 12/91, $115,000.
16. Co-Principal Investigator, “The LoanSTAR Monitoring and Analysis Program,” funded by the Energy Management Center, Office of the Governor of Texas, 9/89 - 8/91, $1,554,000 ($107,363 was the direct responsibility of D. O’Neal).
17. Co-Principal Investigator, “Heat and Mass Transfer in Attics with Radiant Barriers,” funded by the Texas Energy Research and Applications Program, 1/89 - 1/93, $245,000.
18. Co-Principal Investigator, “Development and Validation of Ground Source Heat Pump Application Procedures in Cooling Dominated Climates,” funded by the Texas Energy Research and Applications Program, 1/89 - 12/92, $225,000 ($111,850 was the direct responsibility of D. O’Neal).

19. Co-Principal Investigator, "State Energy Cost Containment Study," funded by the Energy Management Center, Office of the Governor, 9/87-8/89, $257,893.
20. Co-Principal Investigator, "State Energy Cost Containment Study," funded by the Texas Public Utility Commission, Austin, Texas, from 9/86 to 8/87, $133,586.
21. Co-Principal Investigator, "State Energy Study- Phase III," funded by the Texas Public Utility Commission, Austin, Texas, from 9/85 to 8/86, $134,000.
22. Co-Principal Investigator, "State Energy Study-Phase II," funded by the Texas Public Utility Commission, Austin, Texas, from 9/84 to 8/85, $89,680.
23. Co-Principal Investigator, "State Energy Study," funded by the Texas Public Utility Commission, Austin, Texas, from 1/84 to 8/84, $43,880.

b. Federal and Industry Funded Projects

1. Co-Principal Investigator, "Frost Thickness and Roughness Evolution on Cold-Soaked, Fuel-Laden Wings, funded by the Federal Aviation Administration, Aug. 10, 2017 – Aug. 30, 2020. $380,000. (Approximately $150,000 was the direct responsibility of D. O'Neal).
2. Principal Investigator, "Understanding Fan Coil Components and How They Relate to Energy Consumption and Energy Modeling," funded by University of Louisiana at Lafayette, January 1, 2017-December 31, 2018, $50,000. Subcontract on ASHRAE RP-1741, American Society of Heating, Refrigerating, and Air Conditioning Engineers.
3. Principal Investigator, "Developing Fan Power Terminal Unit Data and Models Compatible with EnergyPlus", funded by the Air Conditioning, Heating, and Refrigeration Institute (AHRI), January 1, 2014 – November 2016, $123,800.
4. Principal Investigator, "Variable Air Volume Research Consortium", funded by five industry sponsors, June 1, 2009 – May 31, 2010, $40,000.
5. Co-Principal Investigator, "Development and Verification of a VAV Air Distribution System Model using Fan Powered Terminal Units in Large Commercial Buildings", funded by the Qatar National Research Funds, June 1, 2008- May 31, 2011, $450,000.
6. Co-Principal Investigator, "Comparison of Total Energy Consumption of a Series Fan Powered VAV Terminal Unit versus Parallel Fan Powered VAV Terminal Unit", funded by the American Society of Heating, Refrigerating, and Air Conditioning Engineers, June 1, 2004 – May 31, 2006, $139,992.
7. Co-Principal Investigator, "Performance of Systems with Plate and Spine Fin Condensers after Contamination and Cleaning", funded by the Trane Company, January 2003-April 2004, $87,000.
8. Co-Principal Investigator, "Sampling, Transport, and Collection of Bio-aerosols", funded by the U.S. Army Edgewood Research, Development and Engineering Center, October 2002-September 2005, $257,690.
9. Co-Principal Investigator, "Application of Single Point Representative Sampling to the Remote Waste Handling Facility (RWHF)", funded by Butler Construction of WNY, July 2002-February 2003, $31,950.
10. Co-Principal Investigator, "Design and Testing of an Aerosol Sampling and Transport System (ASTS)", funded by Siemens Dematic, April 2002-February 2003, $164,598.
11. Co-Principal Investigator, "Particulate Monitoring of the TEF Stack", funded by Westinghouse Savannah River Company, March 2002-January 2003, $30,000.
12. Co-Principal Investigator, "Provide engineering support services for MFFF ventilation ducts and main stack", funded by Duke Energy/COGEMA, September 2001-January 2003, $61,462.
13. Co-Principal Investigator, "Development of Criteria for Single Point Representative Air Sampling at Station C of WIPP", funded by Westinghouse Government Environmental Services Company, August 2001-May 2002, $74,477.

14. Co-Principal Investigator, “Selection and Qualification of a Suitable Underground Location for Sampling WIPP Effluent”, funded by Westinghouse Government Environmental Services Company, Co-PIs: A. R. McFarland and D. L. O’Neal, January 2000-May 2001, $119,808.
15. Co-Principal Investigator, “Review of State-of-the Art for Heat Pumps used in Ventilation Air Applications”, funded by the Electric Power Research Institute, Co-PIs: D. L. O’Neal and J.A. Bryant, June 1998 – January 1999, $25,000.
16. Principal Investigator, “Evaluation of Fin Staging Methods for Minimizing Coil Frost Accumulation”, funded by American Society of Heating, Refrigerating, and Air Conditioning Engineers, Jan. 1998-Aug. 1999, $93,875.
17. Co-Principal Investigator, "The Pennsylvania State University Systems Opportunity Assessment and Utility Strategic Plan", Funded by E3c, Inc., Sept. 1997-Aug. 1998, $126,336 (Approximately $10,000 was the direct responsibility of D. O'Neal).
18. Co-Principal Investigator, "Agreement to Professional Services between New Mexico State University and TEES", Funded by New Mexico State University, June 1997-June 1998, $19,807 (Approximately $10,000 was the direct responsibility of D. O'Neal).
19. Co-Principal Investigator, “Evaluation of the Performance of a Gas Fired Engine Driven Heat Pump”, funded by the Electric Power Research Institute, September, 1996 - April 1998, $61,068.
20. Co-Principal Investigator, “Technical Support for Monitoring Energy Use of Tulane University”, funded by A. J. Finnin and Associates, July, 1996 - September 1996, $11,790.
21. Principal Investigator, “A Study of Heat Pump Performance under Frosting Conditions,” funded by the GoldStar Company, July, 1994 – Dec. 1996, $99,850.
22. Principal Investigator, “The Use of Hydrophobic Coatings to Reduce Frost Effects on Heat Exchanger Surfaces,” funded by the Electric Power Research Institute, June, 1994 - May, 1995, $47,234.
23. Principal Investigator, “Performance of Residential Air Conditioners at High Outdoor Ambient Temperatures,” funded by Electric Power Institute, June, 1994 - June, 1996, $123,133.
24. Co-Principal Investigator, “Develop a Temperature-Event Based Diagnostic System for Small Commercial Rooftop Units,” funded by Honeywell Corporation, July 1, 1994 - June 30, 1995, $40,000.
25. Co-Principal Investigator, “Effect of Salt and Moisture on Shrouded Probe Performance,” funded by Westinghouse Electric Corporation, June, 1994 - December, 1996, $212,429.
26. Co-Principal Investigator, “Development of Hydrophobic Coatings to Mitigate Frost Effects on Heat Exchanger Surfaces,” funded by Lennox Industries, December, 1993 - December, 1995, $45,000.
27. Principal Investigator, “Improving Air Conditioner and Heat Pump System Performance with R-22 Replacement Refrigerants,” funded by the U. S. Environmental Protection Agency, October, 1993 - February, 1997, $250,000.
28. Co-Principal Investigator, “An Evaluation of Energy Savings from LoanSTAR Retrofits and Improved Commercial Air Conditioning Systems,” funded by the U. S. Environmental Protection Agency, October, 1993 - September, 1996, $194,278.
29. Principal Investigator, “Two-Phase Flow of R-22 through Flexible Short-Tube Orifices,” funded by United Technologies Corporation, October 1, 1993 - February 1, 1994, $15,232.
30. Principal Investigator, “Characterization of Two-Phase Flow of Refrigerant Mixtures through Short-Tube Orifices,” funded by Untied Technologies Carrier Corporation, March 1, 1993 - October 31, 1993, $56,043.
31. Co-Principal Investigator, “Monitor the Effectiveness of a Thermal Storage System at the Austin Convention Center,” funded by the City of Austin Environmental and Conservation Department, April 1, 1993 - June 1, 1994, $31,981 (approximately $22,000 was the direct responsibility of D. O’Neal).

32. Co-Principal Investigator, “An Evaluation of the Effect of Increased Expansion Device Pressurization on Air Conditioner System Performance,” funded by Southern California Edison Company, 2/91-6/91, $49,110.
33. Principal Investigator, “An Evaluation of the Effects of Improper Refrigerant Charge on a Residential Central Air Conditioner with Orifice Expansion,” funded by the Trane Company, 11/88-5/89, $9,900.
34. Principal Investigator, “Update of the Energy Forecasting Model,” funded by the City of Austin Utility, 5/87-8/88, $4,000.
35. Principal Investigator, “An Analysis of Efficiency Improvements in Room Air Conditioners,” funded by Lawrence Berkeley Laboratory, from 11/86 to 5/88, $35,000.
36. Co-Principal Investigator, “Determination of the Transient Response Characteristics of High Efficiency Commercial Air Conditioners,” funded by Houston Lighting and Power, from 9/86 to 5/88, $28,400.
37. Principal Investigator, “An Evaluation of the Effects of Improper Refrigerant Charge in Residential Air Conditioning Systems,” funded by the Energy Systems Laboratory Consortium, from 9/86 to 8/87, $14,000. Renewal for 9/87 to 8/88 funded at $13,000.
38. Co-Principal Investigator, “Transient Response Characteristics of the Air Source Heat Pump During Reverse Cycle Defrost,” funded by American Society of Heating, Refrigerating and Air Conditioning Engineers, from 9/86 to 7/88, $77,600.
39. Principal Investigator, “An Analysis of Efficiency Improvements in Variable Speed Heat Pumps and Air Conditioners,” funded by Lawrence Berkeley Laboratory, from 6/86 to 2/87, $14,400.
40. Co-Principal Investigator, “An Analysis of Efficiency Improvements in Residential Sized Heat Pumps,” funded by Lawrence Berkeley Laboratory, from 1/85 to 5/86, $51,700.
41. Principal Investigator, “Development of Residential and Commercial Energy End-Use Models for the City of Austin Electric Utility Department,” funded by the City of Austin, Austin, Texas, from 7/1/84 to 10/31/85, $65,638. Renewal for 11/85 to 6/87, funded at $21,000. Renewal for 7/87 to 12/88 funded at $4,000.

c. Texas A&M Funded Projects

1. Co-Principal Investigator, "Impact of Galvanic Corrosion on the Performance of Air Conditioners", funded by the Energy Resources Program, May 1999-August 2001, $37,000.
2. Co-Principal Investigator, “Development of a Non-Intrusive Electrical Monitoring System for Use on Industrial Facilities”, funded by the Energy Resources Program, September, 1996 - August, 1998, $35,200.
3. Principal Investigator, “Development of a Hydrophobic Coating to Mitigate Frost Growth on Heat Exchanger Surfaces,” funded by the Texas A&M Center for Energy and Mineral Resources, two graduate students supported, September, 1992 - August, 1994, $29,300.
4. Principal Investigator, “Development of a Method for Evaluating the Effectiveness of Evaporative Pre-Coolers on Improving the Performance of Commercial Air Conditioners,” funded by the Texas A&M Center for Energy and Mineral Resources, 9/89 - 8/90, $14,500.
5. Principal Investigator, “Transient Dehumidification Characteristics of High Efficiency Residential Sized Central Air Conditioners,” 9/88 - 8/89, $13,100, funded by the Center for Energy and Mineral Resources.
6. Principal Investigator, “A Study on Frost Growth and Its Effect on Heat Transfer for Laminar Flow Between Parallel Plates,” funded by the Center for Energy and Mineral Resources, from 9/84 to 8/85, $13,100.
7. Co-Principal Investigator, “An Attic Simulator for Radiation Heat Transfer Analysis,” funded by the Center for Energy and Mineral Resources, from 9/84 to 8/85, $8,400.

8. Co-Principal Investigator, “Development of a Buildings Energy Load Analysis Research Program,” funded by the Center for Energy and Mineral Resources, from 9/83 to 8/84, $10,000.
9. Principal Investigator, “Development of an Energy Modeling Program,” funded by the Texas Engineering Experiment Station, 6/83 to 8/83, $16,000.

Other Programs:

1. Principal Investigator, “Fourth Annual Symposium on Improving Building Energy Efficiency in Hot and Humid Climates,” funded by the Texas Center for Energy and Mineral Resources, 3/87 to 8/87, $3000; Texas Public Utility Commission, 3/87 to 12/87, $10,000; and Oak Ridge National Laboratory, 6/87 to 12/87, $5,000.
2. Principal Investigator, “Third Annual Symposium on Improving Building Energy Efficiency in Hot and Humid Climates,” funded by the Texas Center for Energy and Mineral Resources, 3/86 to 8/86, $3000; Texas Public Utility Commission, 3/86 to 12/86, $15,000, and Lawrence Berkeley Laboratory, 6/86 to 12/86, $5,000.
3. Co-Principal Investigator, “Development of an Energy Management Conference at Texas A&M,” funded by the Texas Center for Energy and Mineral Resources, from 9/1/83 to 8/31/84, $3,000.
4. Co-Principal Investigator, “A Symposium on Efficient Utilization of Energy in Residential and Commercial Buildings,” funded by the Texas Center for Energy and Mineral Resources, from 9/1/84 to 8/31/85, $3,000.

Senior Design Projects

1. Time Domain Reflectometer, Sandia National Laboratories, Albuquerque, NM, Aug. – Dec. 2007.
2. In-situ Monitoring of a Mechanical Enablement Subsystem, Sandia National Laboratories, Albuquerque, NM, Aug. – Dec. 2007.
3. Circuit Tester, Sandia National Laboratories, Albuquerque, NM, Jan. – May 2006.
4. Telemetry Instrumentation Package, Sandia National Laboratories, Albuquerque, NM, Jan. – May 2006.
5. Volition LED Detecting System, 3M Corporation, Austin, TX, Sept. 2002-May 2003.
6. Thermal-Controlled Housing for Optoelectronic Components, 3M Corporation, Austin, TX, Sept. 2002-May 2003.
7. Automated Connector for a Coke Drum Feed Line, Fluor Daniel Corporation, Sugarland, TX, Sept. 2001-May 2002.
8. Polarization Maintaining Fiber Optic Signal Coupling System, 3M Corporation, Austin, TX, Sept. 2001-May 2002.

Senior Thesis Supervision

1. Jonathan Gooding, “Effect of Vertical Spacing and Heat Sink Configuration of CPU Cooling Fans”, August 1998.
2. Neil Craig, "Effect of a Gate Valve and a 90° Pipe Elbow on the Accuracy of a Non-Magnetic Insertion Turbine Wheel Flow Meter in 4 Inch PVC Pipe", August 1997.
3. Christopher S. Bear, "Multi-Phase flow of a 2.46% Oil/HCFC-22 Mixture through Short Tube Orifices", May, 1996.
4. Duke Damron, "Effect of a Ninety Degree Elbow on the Accuracy of a Non-Magnetic, Insertion Paddle Wheel Flowmeter", December, 1995.

5. L. Coy Henderson, "The Effects of Salt Water Droplets on Shrouded Probe Performance", December, 1995.
6. Greg Morales, "Flow of AC9000 through Short-Tube Orifices", August, 1995.
7. Lease, David, “Experimental Investigation of the Flow Rate of HFC-134a through Short-Tube Orifices, May, 1993.

Graduate Student Supervision

Chairman of Master of Engineering (M.E.) Committees Completed

1. Angela Glidewell, May 2008.
2. Dominc Faraci, August 2006.
3. Greg White, August, 2005.
4. Don Curtis, May, 2002.
5. Kevin Saka, August, 2001.
6. James R. Notman, December, 1986.
7. Daniel Cohen, May, 1986.
8. William Beach, December, 1984.

Chairman of M.S. Committees Completed:

1. Jessica Cramer, “Characterization of Fan-Coil Units with Electric Commutated Motors”, August, 2019.
2. Di Lu, “Annual Energy Use of Series and Parallel Fan Powered Terminal Units”, December 2017.
3. Tongxin “Tony” Zhang, “Effects of Hydrophobic Coating on the Initiation of Frost Formation”, August 2016.
4. Carl Reid, “Applying Mass and Energy Balances to Model Series and Parallel Fan Powered Terminal Units,” August, 2015.
5. Mitch Bible, “Modeling Building Energy Use and HVAC Efficiency Improvements in Extreme Hot and Humid Regions”, August, 2011.
6. Matthew R. Butler, “Design of a Plasma Abatement System”, May, 2011.
7. Solomon Peng, “Modeling of ECM VAV Fan-Powered Terminal Units”, August, 2010.
8. Jacob Edmondson, “Modeling of ECM Controlled Fan-Powered Terminal Units”, December, 2009.
9. Andrew Cramlet, “Performance of ECM Controlled VAV Fan Powered Terminal Units”, August 2008.
10. James Furr, “Development of Models for Series and Parallel Variable Air Volume Terminal Units”, May 2006.
11. J. Brandon Dooley, “Effects of System Cycling, Evaporator Airflow, and Condenser Coil Fouling on the Performance of Residential Split-System Air Conditioners”, December 2004.
12. Jimmy Lloyd, “Natural Convection and Radiation Heat Transfer in Small Enclosures with a Non-Attached Obstruction”, December 2003.
13. Taewon Han, “Evaluation of Mixing in Three Duct Configurations and Development of a Generic Tee Plenum System (GTPS) for Application to Single Point Aerosol Sampling”, August 2003.

14. Taehong Kim, “Evaluation of Mixing Downstream of Tees in Duct Systems with Respect to Single Point Representative Air Sampling”, May 2003.
15. Joseph Martinez, “A Rugged Continuous Air Monitor for Sampling Radio-nuclides”, August, 2002. (Co-Chair with A. McFarland).
16. Phillip Grisham, “The Effect of Galvanic Corrosion on Air Conditioner Performance”, December, 2001.
17. Richard Watters, “Evaluation of Fin Staging Methods to Minimize Frost Accumulation”, May, 2001.
18. Megan A. Corley, “Sources of Error in Chilled and Hot Water Metering at Shared Sites: Differential Pressure Transmitters and Flowmeter Installation”, May 1998.
19. Huixia Zhou, “Frost Formation on a Horizontal Plate with Laminar Air Flow”, May, 1998.
20. David Tootle, “Evaluation of the Performance and Emission of a Gas Fired Heat Pump”, May, 1998, (Co-chair with K. Anammalai).
21. Mario C. Chavez, "The Effect of Roughness on Aerosol Deposition in Tubes", May, 1997.
22. Kedra G. Baltrip, "The Effect of Fan and Heat Sink Design on Heat Removal from Microprocessor Chips", December, 1997, (Co-chair with W. Heffington).
23. James Bonner Watt, "Development of Empirical Temperature Based Degraded Condition Detection Indicators for a Low Tonnage Air Conditioner", December, 1997, (Co-chair with J. Haberl).
24. Chris Asselta, "A Case Study of Two Computer Methods Used to Simulate Fires in Industrial Facilities", December, 1997.
25. Shane Fitzhenry, "Contamination Effects on the Performance of a Heat Pump Charged with R-407c and POE Lubricant", December, 1996.
26. Greg S. Weaver, “An Analysis of Salt and Moisture Deposition on the Air Sampling Probes in the Exhaust Shaft of the Waste Isolation Pilot Plant,” May, 1996.
27. Angel Rodriguez, “Effect of Refrigerant Charge, Duct Leakage, and Evaporator Air Flow on the High Temperature Performance of Air Conditioners and Heat Pumps,” August, 1995.
28. Joel Bain, “The Effect of Hardware Configuration on the Performance of Residential Air Conditioning Systems at High Outdoor Ambient Temperatures,” August, 1995.
29. Brandon Parker, “The Effects of Outdoor Heat Exchanger Hydrophobic Treatment on the Performance of an Air Source Heat Pump,” May, 1995.
30. Michael Davis, “The Development of a Portable Data Acquisition System of Use in Commercial and Industrial Energy Audits,” December, 1993.
31. Jose Gonzalez, “A Simplified Methodology of Sizing Ground Coupled Heat Pump Heat Exchangers in Cooling Dominated Climates,” August, 1993.
32. W. Vance Payne, “The Effects of Air-Flow Modulation and Multi-Stage Defrost on the Perforamnce of an Air-Source Heat Pump”, December, 1992.
33. Randy Margo, “An Experimental Study of Heating Performance and Seasonal Modeling of Vertical U-Tube Ground Coupled Heat Pumps,” December, 1992.
34. David Winiarski, "A Quasi-Steady State Model to Predict Attic Heat Transfer and Energy Savings in Homes Using Radiant Barriers," August, 1992.
35. J. Doug Bronson, "Calibrating DOE-2 to Weather and Non-Weather Dependent Loads For a Commercial Building," May, 1992.
36. Homero Noboa, "The Effect of Dust on the Performance of Radiant Barriers," December, 1991.
37. Sharon Hinchey, "Influence of Thermal Zone Assumptions on DOE-2 Energy Use Estimations of a Commercial Building," August, 1991.

38. Monte Dobson, "An Experimental and Analytical Study of the Transient Behavior of Vertical U-Tube Ground-Coupled Heat Pumps in the Cooling Mode," May, 1991.
39. Kent Rothbauer, "An Analysis of Energy Use in Two Texas State Agencies," December, 1988.
40. Kurt Peterson, "Determination of the Transient Response Characteristics of the Air-Source Heat Pump during the Reverse Cycle Defrost," August, 1988.
41. Steven Penson, "Development of a Room Air Conditioner Design Model," May, 1988.
42. Chris Maiten, "Prediction of Fluid Flow in Curved Pipe Using the Finite Element Method," May, 1987.
43. Curtis Boecker, "Design Optimization of Residential-Sized Air-Source Heat Pumps," May, 1987.
44. Mohsen Farzad, "Computer Simulation and Energy Analysis of Two Commercial Buildings in Austin, Texas," Dec. 1986.

Chairman of M.S. Committees In Progress:

Chairman of Ph.D. Committees Completed:

1. Tongxin Zhang, "A Study of Frost Growth and Roughness on a Cold Flat Plate under Forced Convection," May 2020.
2. Juan A. Cornejo, "Characterizing Early Frost Formation on Vertical Surfaces under Forced Convection," May 2020.
3. Michael A. Davis, "Development of a Laboratory Verified Single-Duct VAV System Model with Fan Powered Terminal Units Optimized Using Computational Fluid Dynamics", August 2010. Currently on staff at NYU Abu Dhabi.
4. Brandon Dooley, "Modeling and Verification of Frost Nucleation on Cooled Surfaces", May 2010. Currently on research staff at Heat Transfer Research, Inc.
5. Yang, Jianxin, "A Study of the Heat Pump Fin Staged Evaporators under Frosting Conditions", August 2003.
6. Seongwoo Woo, "The Effect of a 90° Elbox on the Accuracy of Liquid Flow Measurement with an Insertion Flowmeter", August, 2000. Currently on research staff at Samsung.
7. Ramadan Mohamed, "Modeling of Refrigerant Flow through Flexible Short Tube Orifices", August, 2000. Currently dean of engineering at Minia University, Egypt.
8. W. Vance Payne, "A Universal Mass Flowrate Correlation for Refrigerants and Refrigerant/Oil Mixtures Flowing through Short Tube Orifices", May, 1997. Currently on research staff at National Institute of Science and Technology.
9. Ying Gong, "An Investigation of Heat Transfer During the Freezing of Condensate Droplets," May, 1996. Currently on research staff at Daiken.
10. John Bryant, "The Effect of Hydrophobic Treatments on Droplet Condensation and Freezing," December, 1995. Currently on faculty in construction science at Texas A&M University.
11. Yian Gu, "Effect of Backfill on the Performance of a Vertical U-Tube Ground-Coupled Heat Pump," August, 1995. Currently at York Products.
12. Norman Muraya, "Numerical Modeling of the Transient Thermal Interface of Vertical U-Tube Heat Exchangers," December, 1994. (Co-Chaired with W. Heffington). Currently at City of Austin Utility.
13. Bert McJimsey, "An Experimental Investigation of the Effect of Oil on Concrete Heat Transfer and Pressure Drop of a HFC-32/HFC-121 Mixture," December, 1994.

14. Darin Nutter, “Analysis of Mass Flow and Enhanced Mass Flow Methods of Flashing Refrigerant-22 from a Small Vessel,” December, 1994. Currently on faculty in mechanical engineering at the University of Arkansas.
15. Homero Noboa, “The Influence of Dust on the Absorptivity of Radiant Barriers,” December, 1993. Currently on research staff at Johnson Controls.
16. Yongchan Kim, “Two -Phase Flow of HFC-22 and HFC-134a through Short-Tube Orifices,” May, 1993. Currently on faculty of mechanical engineering at Korea University.
17. Mario Medina, “Development of a Transient Heat and Mass Transfer Model of Residential Attics to Predict Energy Savings Produced by the Use of Radiant Barriers,” December, 1992. (Co-Chaired with W. D. Turner). Currently on faculty of architectural engineering at University of Kansas.
18. Mohsen Farzad, "Modeling the Effects of Refrigerant Charging on Air Conditioner Performance Characteristics for Three Expansion Devices," August, 1990. Currently at United Technologies.
19. Srinivas Katipamula, "A Study of the Transient Behavior during Start-up of Residential Heat Pumps," Dec. 1989. Currently on the research staff at Pacific Northwest National Laboratories.
20. Sekhar Kondepudi, "The Effects of Frost Growth on Finned Tube Heat Exchangers under Laminar Flow," Dec. 1988. Currently at Singapore University.

Chairman of Ph.D. Committees in Progress:

1. Tongxin Zhang, expected graduation, May 2020

Instruction

Course	No. of Times Taught
Texas A&M University	
ENGR 112 – Foundations of Engineering II	3
ENGR 212 – Principles of Engineering I	3
ENGR 385 – Problems for Co-op Students	8
ENGR 400 – Public Leadership Development	7
ENGR 489 – Interdisciplinary Design	1
MEEN 327 – Thermodynamics	11
MEEN 328 Thermodynamics II	5
MEEN 401- Introduction to Mechanical Engineering Design	3
MEEN 402 – Intermediate Design	2
MEEN 436 - Principles of Heating, Ventilating and Air Conditioning	8
MEEN 437 - Principles of Building Energy Analysis	1
MEEN 445 – Mechanical Engineering Design II	1
MEEN 446 – Mechanical Engineering Design III	1
MEEN 461 - Heat Transfer	4
MEEN 481 – Seminar	1
MEEN 624 - Two Phase Flow and Heat Transfer	3
MEEN 630 - Intermediate Heat Transfer	4
MEEN 664 - Energy Management in Commercial Buildings	3
Baylor University	
EGR 1095 – First Year Seminar	1
ME 2345 – Thermodynamics	1
ME 4396 – Heating, Ventilating, and Air Conditioning	3

Post-Docs Supervised

P. Yin, 2015
X. Yuan, 1992-93
B. H. Kim, 1994-5

Baylor University Service:

Council of Deans, August 2012-present
Provost Search Committee, May 2014-December 2014; February-April 2016
Staff Search Committee, Jan 2014-May 2014; Sept 2016-Dec. 2016
Enrollment Management Taskforce, September 2012-present

Texas A&M University Service:

University Research Council, May 2011 – August 2012
Intellectual Property Constituent Committee, May 2011-August 2012
TAMU Research Environmental Council, May 2011 – August 2012
College of Engineering Dean Search Committee, Dec. 2010 – October 2011
College of Engineering, Enrollment Management Policy Committee, Sept. 2009 – May 2010
Civil Engineering Department Head Search Committee, Chair, Sept. 2009 – June 2010
University Small Scope Renovation Projects Committee, January 2006- July 2006
Corps of Cadets, Academic Mentor, August 2003-present
ETID Department Head Search Committee, Chair, Oct. 2004-June 2005
Mechanical Engineering ABET Committee, May 2003-May 2011
Mechanical Engineering Curriculum Committee, Sept. 2002- May 2003
Mechanical Engineering Department, Strategic Planning Committee, Feb. 2003 – April 2003
Mechanical Engineering Department, Teaching Loads Committee, Chair, Jan. – March 2002
Texas A&M University Energy Conservation Committee, Sept. 2001-Aug. 2002
Mechanical Engineering Department, Fluids and Heat Transfer Division Leader, September 1998 – July 2000
Mechanical Engineering Department Computer Committee, Sept. 1993 – May 1997; May 1998 – July 2000
Mechanical Engineering Department Graduate Curriculum Committee, Sept. 1997 – April 1998
Mechanical Engineering Department Undergraduate Curriculum Committee, Sept. 1996 - August 1997; May 1998-July 2000
Mechanical Engineering Department Tenure and Promotion Committee, Jan. 1997 – Dec. 1999; Chair, Sept. 1998-Aug. 1999
Nuclear Engineering Department Head Search Committee, May 1997 – December 1997
Dwight Look College of Engineering, Committee on ENGR 111/112, Sept. 2002-May 2003.
Dwight Look College of Engineering, ENGR 212 Coordinator, Sept. 1997 – Aug. 2002
Dwight Look College of Engineering, Honors and Awards Committee, June 1998 – August 1998
Faculty Senate, Budget Information Committee, June 1997 – May 1998
Faculty Senate, Engineering Caucus Leader, May 1997 – May 1998
Faculty Senate, Member, May 1995 – May 1998

Professional Society Service:

ASHRAE

HVAC&R Research Journal Subcommittee
Member, July 2010-June 2012

Student Activities Committee, July 2019-present

ABET Representative, July 2019-present

Scholarship Trustee, July 2006- June 2015
Chair, July 2007-June 2009

Handbook Committee, July 2004 – June 2010
Chair, July 2009 – June 2010
Vice-Chair, July 2008-June 2009
Chair, Handbook of Fundaments Subcommittee, July 2005-June 2009

Technology Council, Member, July 2001 – June 2004
Chair, Special Projects Subcommittee, July 2003-June 2004
Chair, Oversight Subcommittee, July 2001-June 2003

Technical Activities Committee: July 1996-June 2000
Chair: July 1999-June 2000
Vice-Chair: July 1998-June 1998

ASHRAE Technical Committee 7.6 (Unitary Heat Pumps and Air Conditioners):
Chairman, July 1993-June 1995
Vice-Chairman, July 1991-June 1993

Program Committee, July 1993-June 1996

Session Chair, "Measurements and Modeling of Heat and Mass Transfer", ASHRAE Summer Meeting, Saint Louis, Missouri, June, 2016.

Session Co-Organizer, "Heat Transfer, Psychrometrics and Coil Freezing at Freezer Temperatures," ASHRAE, Winter Annual Meeting, Chicago, Illinois, January 1993

Session Organizer, "Transport Properties of Alternate Refrigerants," ASHRAE Winter Meeting, New York, New York, January 1993.

Session Organizer, "Heat Pump Reliability and Performance," ASHRAE Winter Meeting, Atlanta, Georgia, January 1990.

Session Organizer, "Frost Formation on Heat Exchanger Surfaces: Problems and Solutions," ASHRAE Winter Meeting, Dallas, Texas, February, 1988.

ASME

Energy Resources Board, February 2000-January 2003
IMECE Program Coordinator, 2002-2003

Journal of Energy Resources Technology, Associate Technical Editor, June 1999-May 2003

Co-Organizer, "Renewable and Advanced Energy Systems for the 21st Century", Joint ASME/JSME/JSES/KSME International Conference, Maui, Hawaii, March 1999.

ASME Heat Pump Technical Committee: Nov. 1990 – Nov. 1994
Chair, Nov. 1993-Nov. 1994
Secretary, Dec. 1991-Nov. 1993

Symposium Organizer, "Heat Pump and Refrigeration Systems Design, Analysis, and Applications," International Mechanical Engineering Congress and Exposition, Atlanta, Georgia. November, 1996.

Symposium Organizer, "Heat Pump and Refrigeration Systems Design, Analysis and Applications," International Mechanical Engineering Congress and Exposition, San Francisco, California, November 1995.

Session Co-Organizer, "Design and Performance of Ground-Coupled Heat Pumps," ASME/JSME International Solar Energy Conference, Maui, Hawaii, March 1995.

Session Co-Organizer, "Heat Pump Design, Analysis and Applications," ASME Winter Annual Meeting, New Orleans, Louisiana, November, 1993.

Session Co-Organizer, "Heat Pump Design, Analysis, and Applications," ASME Winter Annual Meeting, Anaheim, California. November 1992.

Session Organizer, "Ground-Coupled Heat Pumps," ASME International Solar Energy Conference, Maui, Hawaii, April 1992.

Session Organizer, "Energy Monitoring for Building Analysis," ASME Solar Division Meeting, Reno, Nevada, March 1991.

ABET

Program Evaluator, 2007 – present, Programs Visited:
University of New Orleans
University of Wisconsin – Milwaukee
Oregon Institute of Technology
California Institute of Technology
University of Wisconsin – Madison
Southern Illinois University – Edwardsville
University of Alabama at Huntsville
University of South Carolina
Wentworth Institute of Technology

Board of Delegates, January 2020 – present
Strategic Goals Committee, January 2020

National Science Foundation

Panel Reviewer, SBIR/STTR Program, August 2007

Other Service Activities

April 2007 – Graduate Program Evaluator, Mechanical Engineering Department, University of Arkansas, Fayetteville, Arkansas

February 2006 – 2012; 2014-present, Board of Trustees, InterVarsity Christian Fellowship, Madison, Wisconsin.
Finance Committee
Chair, 2008-2009
Member, 2006-2009, 2014-present
Audit Committee, 2014-present
Board Vice-Chair, 2009-2010
Board Chair, 2010-2012, 2016-2017
Chair, Presidential Discernment and Search Task Force, 2015-2016

May 1992 - HCFC Alternatives Program Peer Review Panel, Environmental Protection Agency, Research Triangle Park, North Carolina

October 1989 - Session Organizer, "Moisture and Dehumidification," Sixth Annual Symposium on Improving Building Systems in Hot and Humid Climates," Dallas, Texas

September 1988 - Session Organizer, "End-Use Metering in Commercial Buildings," Fifth Annual Symposium on Improving Building Energy Efficiency in Hot and Humid Climates, Houston, Texas

April 1988 - Radiant Barrier Workshop Advisory Panel," Electric Power Research Institute.

September 1987 - Symposium Director, Fourth Annual Symposium on Improving Building Energy Efficiency in Hot and Humid Climates, Sponsored by the Energy Systems Laboratory, M. E. Department.

May 1987 - Appointed Secretary, ASHRAE Technical Committee 7.6 (Unitary Heat Pumps and Air Conditioners).

November 1986 - Symposium Director, Third Annual Symposium on Improving Building Energy Efficiency in Hot and Humid Climates, Sponsored by the Energy Systems Laboratory, M. E. Department.

September 1985 - Exhibit Coordinator, Second Annual Symposium on Building Energy Efficiency in Hot and Humid Climates, Sponsored by the Energy Management Group, M. E. Department.

August 1984 - Exhibit Coordinator, First annual Symposium on Efficient Utilization of Energy in Residential and Commercial Buildings, Sponsored by the Energy Management Group, M. E. Department.

October 1983 - February, 1985 - Chairman, Appliance Standards Analysis Review Group, U. S. Department of Energy and Lawrence Berkeley Laboratory, Berkeley, California.

August 1983 - Instructor, Building Load Analysis Short Course, Sponsored by Energy Management Group, Mechanical Engineering Department.