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Education: Purdue University, West Lafayette, IN
BS Mechanical Engineering (with distinction), MS Mechanical Engineering, Dec.1978

Professional Societies: Society of Automotive Engineers, American Society of Mechanical Engineers, Tau Beta Pi.

Professional Experience
September 1978 to present: R&D engineer and energy technology analyst, Oak Ridge National Laboratory, operated by UT-Battelle, LLC. This work environment has required team work, excellent communication, and writing and presentation skills. Fossil fuel energy technologies have been a career-long focus. Emphasis has been on new technology, efficiency, fuels, environmental compliance and economic viability. The past 17 years has been devoted to vehicle efficiency and emissions, internal combustion engines, engine exhaust after-treatment and diesel engine driven generators. Much of this work involved experimental R&D, literature review and detailed analysis. Sponsors and cooperative work partners outside of the U.S. Department of Energy for my work efforts have included Detroit Diesel (Daimler), Exxon-Mobile, Caterpillar, Cummins Engine, Ford, Army, Air Force, Marines, Navistar, NY-NJ Port Authority, TVA, NETL, Y-12 National Security Complex.

Work R&D, analysis topics.

- Vehicle fuel economy, efficiency, energy use and dissipation, emissions and alternative fuels.
- Diesel soot filters, soot properties, soot combustion/oxidation kinetics, ash deposition
- Spark ignition & diesel engines, alternative engine fuels, engine emissions, exhaust aftertreatment systems
- Lightweight diesel engine driven generators
- Technical and economic evaluation of transportation vehicle powering options including conventional and advanced power systems
- Disposition of weapons-usable plutonium
- Application of chaotic time series analysis to evaluate and characterize the nonlinear dynamics in combustion systems, including internal combustion engines and pulse combustors
- Combustors for externally fired engines (Stirling natural gas engines) and other uses
- Advanced coal combustion systems: technical and economic evaluation
- Technical and economic analysis of steam plants, including parametric studies
- Fluidized bed combustion systems including bubbling, circulating and pressurized fluid beds
- Pneumatic conveying of solids
- Coal combustion, gasification and pyrolysis
- Conversion of oil-fired industrial boilers to coal firing
- Atomic Vapor Laser Isotope Separation (AVLIS)
- Collection and destruction of volatile-phase chlorinated hydrocarbons
- Engineering economics, life cycle cost analysis
- Safety analysis and hazard risk assessment of nuclear waste and processing facilities

Professional Development

Advanced Diesel Particulate Filtration Systems, SAE, 2 day course, 2005
Design of Experiments: University of Wisconsin, 3 semester credit hours, 1997.
Strengths of Materials: University of Wisconsin, 3 semester credit hours, 1998.
Leadership and Management of Projects: Lockheed Martin Energy Systems,1996.
Fundamentals of Acoustics, with Laboratory: Penn State U., 4 semester credit hours, 1996.
SAE Session Organizer and Co-Chair: 2014 SAE Congress, Vehicle Efficiency Session, 2002 Fall Fuels & Lubricants Meeting, General Fuels Session, 2003 Spring Fuels & Lubricants Meeting, Alternative Fuels Session, and 2004 Powertrain & Fluid Systems Conference, Alternative Fuels Session. SAE Congress, Vehicle Fuel Economy Session, 2015, 2016

Foreign Assignment: IEA Coal Research, London, UK

IEA Coal Research (now IEA Clean Coal Centre) is a part of the International Energy Agency (IEA), which was founded by the countries of the Organization for Economic Co-operation and Development. I served as a staff member for from June, 1985 to September, 1986 as part of a cooperative agreement between Oak Ridge National Laboratory, the US Department of Energy and IEA. My focus was evaluation of industrial fluidized bed combustion systems.

Awards: SAE McFarland Award for contributions to the SAE in leading the development of a new session on whole vehicle fuel economy.

ORNL awards
Development Accomplishment Award, 1998, for contributions to the development of “noisy chaos,” a method of modeling and controlling spark ignition engines in the lean-burn regime. This concept opens the possibility of using similar techniques in numerous engineering applications. The method is based on modeling system dynamics as having important nonlinear and stochastic elements.
Significant Event Award: 1998, 1999, 2003, 2005, 2010
Supplemental Performance Award: 2009, 2011, 2014
ORNL Values World Class Teamwork Award, FY 2001

Patent. U.S. Patent 7257945, Stripping ethanol from ethanol-blended fuels for use in NOx SCR. M.D. Kass, R.L. Graves, J.M. Storey, S.A. Lewis, Sr., C.S. Sluder, J.F. Thomas. August 21, 2007.

Publications and Reports: Author or co-author of over 80 published reports (classified reports are not listed) and many business confidential, internal or letter reports and presentations.

Volunteer, Non-Work Activities

Big Brothers, Big Sisters of East TN: Big Bother for 6 years.
American Youth Soccer Organization, Region 124 and 337. Coach 10 seasons, also referee.
Competitive, Middle and High School soccer referee, 6 Seasons.
Assistant Soccer Coach, Powell Middle School, 1 season. Player-coach adult soccer teams.
Bridge Refugee Services: Hosted a Vietnamese refugee (minor) in our home for 6 months.
Foster Parent: for one teenager for 6 months.
Several 1-week mission trips to Tijuana Mexico Orphanage and Church.
Emerald Youth Foundation: Math and general homework helper

Reports and Publications

Professional Journal Articles

1. Pannone, G., Thomas, J., Reale, M. and Betz, B. (2017) “Decomposing Fuel Economy and Greenhouse Gas Regulatory Standards in the Energy Conversion Efficiency and Tractive Energy Domain,” *SAE Int. J. Fuels Lubr.* 10(1):2017, doi:10.4271/2017-01-0897.
2. Thomas, J., "Vehicle Efficiency and Tractive Work: Rate of Change for the Past Decade and Accelerated Progress Required for U.S. Fuel Economy and CO2 Regulations," *SAE Int. J. Fuels Lubr.* 9(1):2016, doi:10.4271/2016-01-0909.
3. Zhiming Gao, SJ Curran, JE. Parks II, DE Smith, RM. Wagner, CS Daw, KD Edwards, JF Thomas “Drive cycle simulation of high efficiency combustions on fuel economy and exhaust properties in light-duty vehicles,” *Applied Energy* 157 (2015) 762–776, April 2015.
4. Thomas, J., "Drive Cycle Powertrain Efficiencies and Trends Derived from EPA Vehicle Dynamometer Results," *SAE Int. J. Passeng. Cars - Mech. Syst*. 7(4):2014, doi:10.4271/2014-01-2562. SAE 2014 International Powertrain, Fuels & Lubricants Meeting, October 20-23, 2014, Birmingham, UK.
5. Thomas, J., Huff, S., and West, B., "Fuel Economy and Emissions Effects of Low Tire Pressure, Open Windows, Roof Top and Hitch-Mounted Cargo, and Trailer," *SAE Int. J. Passeng. Cars - Mech. Syst.* 7(2):2014, doi:10.4271/2014-01-1614.
6. J.F. Thomas, H-L. Hwang, B. West, S. Huff, Predicting Light-Duty Vehicle Fuel Economy as a Function of Highway Speed, *SAE Int. J. Passeng. Cars - Mech. Syst*. 6(2):2013, doi:10.4271/2013-01-1113.
7. Storey, J., Lewis, S., Szybist, J., Thomas, J. et al., "Novel Characterization of GDI Engine Exhaust for Gasoline and Mid-Level Gasoline-Alcohol Blends," *SAE Int. J. Fuels Lubr.* 7(2):2014. (other authors T. Barone, M. Eibl, E. Nafziger, and B. Kaul) 2014-01-1606
8. J. E. Parks, V. Prikhodko, W.P. Partridge, Jae-Soon Choi, K. Norman, P. Chambon, J.F. Thomas, S.P. Huff, P Chambon 'Lean Gasoline Engine Reductant Chemistry During Lean NOx Trap Regeneration', 2010 SAE Powertrains, Fuels and Lubricants Meeting, SAE Int. J. Fuels Lubr. 3(2):956-962, 2010, doi:10.4271/2010-01-2267. [J.F. Thomas left off some versions by oversight].
9. Jian Wang, John Storey, Norberto Domingo, Shean Huff, John Thomas, and Brian West, Studies of diesel engine particle emissions during transient operations using an Engine Exhaust Particle Sizer, Aerosol and Air Quality Research, 2004.
10. M.D. Kass, J.F. Thomas, S.A. Lewis, Sr., J.M. Storey, N. Domingo, R.L. Graves, A. Panov, Selective Catalytic Reduction of NOx Emissions from a 5.9 Liter Diesel Engine Using Ethanol as a Reductant. *SAE transactions* 112.4 (2003): 2584-2593, *Journal of Fuels and Lubricants*, doi: 10.4271/2003-01-3244.
11. C.S. Daw, C.E.A. Finney, J.B. Green, Jr, M.B. Kennel, J.F. Thomas, F. T. Connolly, A Simple Model for Cyclic Variations in a Spark-Ignition Engine, SAE paper 962086, SAE 1996 Transactions, *Journal of Engines*, V105-3, SAE Int. Fall Fuels & Lubricants Meeting and Exposition, San Antonio, October 14-17, doi:10.4271/962086.
12. C.S. Daw, J.F. Thomas, G.A. Richards and L.L. Narayanaswami, Chaos in Thermal Pulse Combustion, CHAOS, Vol. 5, Issue 4, pp. 662-670 (1995).
13. C.S. Daw, J.F. Thomas, M.A. Rhode, R.W. Rollins, A.J. Markworth, Controlling Chaos in a Model of Thermal Pulse Combustion, *Journal of Applied Physics* pp. 2224-32 (1995).
14. C.S. Daw and J.F. Thomas, Pneumatic Conveying of Coal and Coal-Limestone Mixtures as Applied to Atmospheric Fluidized Bed Combustion, *Journal of Powder and Bulk Solids Technology*, **7** (1983) 2; 6-12.
15. J.S. Barnhart, J.F. Thomas, N.M. Laurendeau, Pulverized coal combustion and gasification in a cyclone reactor. 2. Model and comparison with experiment, *Ind. Eng. Chem. Process Des. Dev.* 1982, 21, 681-689
16. F.P. Incropera and J.F. Thomas, A Model for Solar Radiation Conversion to Algae in a Shallow Pond, Solar Energy, Vol. 20, pp. 157-165, Pergamon Press, 1978.

Conference Papers

17. Prikhodko, V., Pihl, J., Toops, T., Thomas, J. et al., "Selective Catalytic Reduction of Oxides of Nitrogen with Ethanol/ Gasoline Blends over a Silver/Alumina Catalyst in Lean Gasoline Engine Exhaust," SAE Technical Paper 2015-01-1008, 2015, doi:10.4271/2015-01-1008.

18. Kass, M., Noakes, M., Kaul, B., Edwards, D. et al., "Experimental Evaluation of a 4-cc Glow-Ignition Single-Cylinder Two-Stroke Engine," SAE Technical Paper 2014-01-1673, 2014. (other authors Timothy Theiss, Lonnie Love, Ryan Dehoff, and John Thomas), doi:10.4271/2014-01-1673
19. Richard Blint and Thomas J.F.. "Effect of Oxygen Sensor Fluctuations on PFI Fueled Stoichiometric Gasoline Emissions, Emissions 2014 Conference, Troy MI, June 11-12, 2014.
20. J.F. Thomas, B. West, S. Huff, Effect of Intake Air Filter Condition on Diesel Vehicles, SAE paper 2013-01-0311, doi:10.4271/2013-01-0311, SAE 2013 World Congress, Detroit, MI, April, 2013.
21. S. Huff, B. West, J.F. Thomas, Effects of Air Conditioner Use on Real-World Fuel Economy, doi: 10.4271/2013-01-0551, SAE paper 2013-01-0551, SAE 2013 World Congress, Detroit, MI, April, 2013.
22. J.F. Thomas, B. West, S. Huff, K. Norman, Effect of Intake Air Filter Condition on Light-Duty Gasoline Vehicles, SAE Powertrains, Fuels & Lubricants Meeting, Malmo Sweden, SAE paper 2012-01-1717, September 2012, doi:10.4271/2012-01-1717.
23. J. Storey, T. Barone, J. Thomas, S. Huff, Exhaust Particle Characterization for Lean and Stoichiometric DI Vehicles Operating on Ethanol-Gasoline Blends, SAE 2012 World Congress, Detroit, MI, SAE paper 2012-01-0437, April, 2012, doi:10.4271/2012-01-0437.
24. P. Chambon, S. Huff, K. Norman, K.D. Edwards, J.F. Thomas, V. Prikhodko, 'European Lean Gasoline Direct Injection Vehicle Benchmark' , SAE 2011 World Congress, Detroit, MI, SAE paper 2011-01-1218, April 2011, doi:10.4271/2011-01-1218.
25. Keith Knoll, Brian West, Shean Huff, John Thomas, John Orban, Cynthia Cooper, Effects of Mid-Level Ethanol Blends on Conventional Vehicle Emissions, SAE Paper, 2009-01-2723, SAE 2009 Powertrains, Fuels and Lubricants Meeting, doi:10.4271/2009-01-2723
26. M.D. Kass, J.F. Thomas, D. Wilson, S.A. Lewis, Sr., S.A. Sarles; Assessment of Corrosivity Associated with Exhaust Gas Recirculation in a Heavy-Duty Diesel Engine. SAE Paper 2005-01-0657, 2005, doi:10.4271/2005-01-0657.
27. J.F. Thomas, S.A. Lewis, Sr., B.G. Bunting, J.M. Storey, R.L. Graves, P.W. Park, Hydrocarbon selective catalytic reduction using a silver-alumina catalyst with light alcohols and other reductants. SAE Paper 2005-01-1082, doi:10.4271/2005-01-1082.
28. John M. E. Storey, John F. Thomas, Samuel A. Lewis, Sr., Thang Q. Dam, K. Dean Edwards, Gerald L. DeVault, Dominic J. Retrossa, Particulate Matter and Aldehyde Emissions From Idling Heavy-Duty Diesel Trucks, SAE Paper Number 2003-01-0289, 2003 SAE World Congress, Detroit MI, March 3-6, doi:10.4271/2003-01-0289.
29. J.F. Thomas, M.D. Kass, J.M. Storey, N. Domingo, R.L. Graves, T. Barber, Tennessee Technological University, Targeting the EPA HD-FTP 2007 Emission Standards Using a Modern Diesel Engine with EGR and a SCR/CRT Aftertreatment System, Oak Ridge National Laboratory, National Transportation Research Center, 2002 Technical Meeting, Central States Section, The Combustion Institute, April 2002.
30. G. Singh, R. L. Graves, M.D. Kass, S.A. Lewis, W.P. Partridge, J.F. Thomas, C.F. Habeger, C.L. Aardahl, K.G. Rappe, D.N. Tran, M.A. Delgado, "Exhaust Aftertreatment Research for Heavy Vehicles," SAE 2001-01-2064, SAE Government Industry Meeting, May 2001, doi:10.4271/2001-01-2064.
31. M.D. Kass, J.F. Thomas, J.M. Storey, N. Domingo, J. Wade, G. Kenreck, "Emissions From a 5.9 Liter Diesel Engine Fueled With Ethanol Diesel Blends," SAE 2001-01-2018, presented at the SAE Spring Fuels & Lubricants Meeting, May 7-9, 2001, doi:10.4271/2001-01-2018.
32. G. Singh, R. L. Graves, W. Partridge, J. M. Storey, J. F. Thomas, B. M. Penetrante, R. M. Brusasco, B. T. Nerritt, G. E. Vogtlin, C. L. Aardahl, C. F. Habeger, M. L. Balmer "Emission Control Research to Enable Fuel Efficiency: Department of Energy Heavy Vehicle Technologies," SAE 2000-01-2198, presented at the SAE Government/Industry Meeting, Wash. D. C., June 19-21, 2000.
33. J.F. Thomas, R.H. Staunton, "What Fuel Economy Improvement Technologies Could Aid the Competitiveness of Light-Duty Natural Gas Vehicles?," SAE 1999-01-1511, presented at the SAE Spring Fuels and Lubricants Meeting & Exposition, Dearborn, MI., May 1999. doi:10.4271/1999-01-1511
34. J.S. Armfield, P. Datskos, R. L. Graves, I. Sauers, J. F. Thomas, O. Yasar, Ignition Improvement for Natural Gas Engines, Proc. Of the 1997 DOE Office of Transportation Technologies Annual Customer Coordination Meeting, Oct. 27-30, 1997, Dearborn, MI, Published by the U.S. Department of Energy.
35. R.P. Wichner, S.J. Ball, C.S. Daw, J.F. Thomas, Metal Burning in Graphite-Moderated Reactors, Proceedings of the 1997 Technical Meeting of the Central States Section of the Combustion Institute, Point Clear, Alabama, April 28-29, 1997.
36. C.S. Daw, J. F. Thomas, M.A. Rhode, R W. Rollins, A.J. Markworth, Controlling Cycle-by-Cycle Variation in a Pulse Combustor, Joint Technical Meeting of the Central States, Western States, and

Mexican National Sections of The Combustion Institute, and the American Flame Research Committee, April 23-26, 1995, San Antonio, TX.

37. C.S. Daw, J.F. Thomas, G.A. Richards and L.L. Narayanaswami, Experimental Evidence for Deterministic Chaos in Thermal Pulse Combustion, The Combustion Institute, Central States Section 1994 Spring Technical Meeting, June 6-7, 1994, Madison, WI.
38. R.M. Wagner, C.S. Daw, and J.F. Thomas, "Controlling Chaos in Spark-Ignition Engines," Central and Eastern States Section Joint Technical Meeting of the Combustion Institute, New Orleans, March 15-17, 1993.
39. C.S. Daw, J.F. Thomas, and G.A. Richards, Modeling Deterministic Chaos in Thermal Pulse Combustion, The Combustion Institute, Central States Section Technical Meeting, Columbus, Ohio, April 26-28, 1992.
40. A.D. Vasilakis and J.F. Thomas, Stirling Heat Pump External Heat Systems: An Appliance Perspective, 97th Intersociety Energy Conversion Engineering Conference, Proceedings pp 3.231-8, SAE paper no. 929150, San Diego, CA, August 3-7, 1992 doi:10.4271/929150.
41. F.L. Beason, R.M. Schilling and J.F. Thomas, Evaluation of Environmentally Acceptable Coal Combustion Technology to Increase Coal Use at CONUS Air Force Bases, Presented at the 84th Annual Air & Waste Management Association Conference and Exhibition, June 16-21, Vancouver B.C., Oak Ridge National Laboratory, Oak Ridge, TN, 1991.
42. R.L Graves, W.K. Kahl and J.F. Thomas, Potential of PFB and AFB Packaged Industrial Boilers, American Flame Research Committee, 1982 Fall Symposium, Newport Beach, CA, October, 1982.
43. C.S. Daw, M.E. Lackey and J.F. Thomas, A Fundamental Study of the Effects of Moisture, Air Velocity, Solids Loading and Particle Size on the Pneumatic Conveying of Coal and Coal-Limestone Mixtures, Presented at the AIChE Spring National Meeting, Anaheim, CA, June, 1982.
44. C.S. Daw, , J.F. Thomas R.S. Holcomb, C.K. Andrews, Atmospheric Fluidized Bed Combustion Coal Feeding Test Program, Oak Ridge National Laboratory, Oak Ridge, TN, Presented at the Sixth International Conference on Fluidized Bed Combustion, Atlanta, GA., 1980.
45. J.S. Barnhart, J.F. Thomas and N.M. Laurendeau, Pulverized Coal Combustion and Gasification in a Cyclone Reactor: Experiment and Model, 1979 Spring Combustion Meeting, Western States Section of The Combustion Institute, Provo, UT, April 23-24, 1979.
46. J.F. Thomas, Development of an Atmospheric Pulverized Coal Cyclone Combustor: Mathematical Modeling and Preliminary Experimental Results, MSME Thesis, Purdue University, West Lafayette, IN, Dec., 1978.

Laboratory Reports

47. J.F. Thomas, S.P. Huff, L.G. Moore, B.H. West, Measurement of Vehicle Air Conditioning Pull-Down Period, ORNL/TM-2016/275, DOI: 10.2172/1287033
48. Theiss,Tim et al, Summary of High-Octane Mid-Level Ethanol Blends Study, ORNL/TM-2016/42. DOI: 10.2172/1286966
49. John Thomas, Brian West, Shean Huff, "Effects of High Octane Ethanol Blends on Four Legacy Flex-Fuel Vehicles, and a Turbocharged GDI Vehicle," ORNL/TM-2015/116, March, 2015, Oak Ridge National Laboratory. DOI: 10.2172/1185964
50. Storey, J M, Theiss, T J, Kass, Michael D, Finney, Charles E A, Lewis, S, Kaul, B C, Besmann T M, Thomas J F, Hiram Rogers, H, Sepaniak, M. (2014). Fuel Flexibility: Landfill Gas Contaminant Mitigation for Power Generation. ORNL/TM-2014/44, doi:10.2172/1130430, 2014
51. John F. Thomas, Shean P. Huff, Brian H. West, Fuel Economy and Emissions of a Vehicle Equipped with an Aftermarket Flexible-Fuel Conversion Kit, ORNL/TM-2011/483, Oak Ridge National Laboratory, April, 2012.
52. J. F. Thomas, C. W. Ayers, M. B. Scudiere, Technology Assessment for the Towable 100 kW Tactical Power Source, ORNL/LTR-2010/254, for the Communications-Electronics Research Development and Engineering Center, U.S. Army Research, Development and Engineering Command, under work-for-others inter-agency agreement, MIPR9GDATJCAJ6, DOE Project No. 2374-V071-09. Oak Ridge National Laboratory, August, 2011
53. Brian West, Keith Knoll, Wendy Clark, Ronald Graves, John Orban, Steve Przesmitzki, Timothy Theiss, Effects of Intermediate Ethanol Blends on Legacy Vehicles and Small Non-Road Engines, Report 1, Oak Ridge National Laboratory and National Renewable Energy Laboratory, NREL/TP-540-43543 or ORNL/TM-2008/117, October 2008 [removed from author list by DOE manager – in acknowledgements].

54. R. Bechtold, J. F. Thomas, S. P. Huff, J. P. Szybist, T. J. Theiss, B. H. West, M. Goodman, T. A. Timbario, Technical Issues Associated with the Use of Intermediate Ethanol Blends (>E10) in the U.S. Legacy Fleet: Assessment of Prior Studies, Oak Ridge National Laboratory, Oak Ridge, TN, ORNL/TM-2007/37, August 2007.
55. J.M. Storey, S.A. Lewis, Sr., B.H. West, S.P. Huff, C.S. Sluder, R.M. Wagner, N. Domingo, J.F. Thomas, M.D. Kass, Hydrocarbon Species in the Exhaust of Diesel Engines Equipped with Advanced Emissions Control Devices, Fuels, Engines, and Emissions Research Center, Oak Ridge National Laboratory, Oak Ridge, TN 37830. Final Report, CRC Project No. AVFL-10b-2, prepared for Coordinating Research Council, Inc., Alpharetta, Georgia, Jan. 2005
56. Kass, MD, D. Wilson, J.F. Thomas, S.A. Lewis, Sr., Assessment of Corrosivity Associated with Exhaust Gas Recirculation in a Heavy-Duty Diesel Engine, Oak Ridge National Laboratory, ORNL/TM-2004/268
57. J.B. Andriulli, J. F. Thomas and 18 others, Development of Proof-of-Concept Units for the Advanced Medium-Sized Mobile Power Sources (AMMPS) Program, ORNL/TM-2001/222, report for Communications and Electronics Command – Research, Development and Engineering Center, Fort Belvoir, VA, Oak Ridge National Laboratory, March 2002.
58. T.J. Theiss, J.C. Conklin, J.F. Thomas, and T.R. Armstrong, Comparison of Prime Movers Suitable for USMC Expeditionary Power Sources, report for USMC Warfighting Laboratory, ORNL/TM-2000/116, Quantico, VA, Oak Ridge National Laboratory, Oak Ridge, TN, March, 2000.
59. J.B. Andriulli, J. F. Thomas and 11 others, "Advanced Power Generation Systems for the 21ST Century: Market Survey and Recommendations for a Design Philosophy," ORNL/TM-1999/213, report for Communications and Electronics Command – Research, Development and Engineering Center, Fort Belvoir, VA, Oak Ridge National Laboratory, Oak Ridge, TN, November, 1999.
60. J.F. Thomas, R.H. Staunton "Efficiency Improvement Opportunities for Light-Duty Natural-Gas-Fueled Vehicles," Report to the Office of Advanced Automotive Technology, U.S. Dept. of Energy, ORNL TM-13686, Oak Ridge National Laboratory, Oak Ridge, TN, Dec. 1998.
61. D. J. Spellman, J.F. Thomas, R. J. Bugos, History of the Weapons-Usable Plutonium Disposition Program Leading to DOE's Record of Decision, ORNL/TM-13416, Fissile Material Disposition Program, Oak Ridge National Laboratory, Oak Ridge, TN, April, 1997.
62. S.R. Greene, S.E. Fisher, J.F. Thomas and 19 others, FMDP Reactor Alternative Summary Report: Vol.-3 Partially Complete LWR Alternative, ORNL/TM 13275/V3, Fissile Material Disposition Program, Oak Ridge National Laboratory, Oak Ridge, TN, September, 1996
63. M.A. Green, R.H. Staunton and J.F. Thomas, Safety Study: TRU/SLLW Staging Facility Building 7879, ORNL/ENG/SS-4, Oak Ridge National Laboratory, Oak Ridge, TN, March 5, 1991.
64. J.F. Thomas and J.M. Young, Coal Burning Technologies Applicable to Air Force Central Heating Plants, ORNL/TM-11173, Oak Ridge National Laboratory, Oak Ridge, TN, December, 1989.
65. F.P. Griffin, J.F. Thomas, R.S. Holcomb and J.M. Young, Ranking of Air Force Heating Plants Relative to the Economic Benefit of Coal Utilization, ORNL/TM-11100, Oak Ridge National Laboratory, Oak Ridge, TN, November, 1989.
66. J.F. Thomas, F.P. Griffin and J.M. Young, Economic Benefit of Coal Utilization/Conversion at Air Force Bases: Screening Study, ORNL/TM-11113, Oak Ridge National Laboratory, Oak Ridge, TN, August, 1989.
67. J.F. Thomas, R.W. Gregory and M. Takayasu, Atmospheric Fluidized Bed Boilers for Industry, ICTIS/TR35, London, UK, IEA Coal Research, November, 1986.
68. E.T. Pierce, J. Barkenbus, E.C. Fox, D.M. Joncich, E.B. Sigmon, and J.F. Thomas, Fuels Selection Alternatives for Army Facilities. Technical Report E-86/03, Construction Engineering Research Laboratory, US Army Corps of Engineers, Champaign, IL, December, 1986.
69. E.T. Pierce, E.C. Fox, and J.F. Thomas, Fuel Burning Alternatives for the Army. Interim Report E-85/04, Construction Engineering Research Laboratory, US Army Corps of Engineers, Champaign IL., Jan., 1985.
70. C.S. Daw and J.F. Thomas, Frictional Pressure Drop in Horizontal Pneumatic Conveying of Coal and Limestone, ORNL/TM-8703, Oak Ridge National Laboratory, Oak Ridge, TN, August, 1983.
71. O.H. Klepper, J.G. Delene, J.P. Drago, E.C. Fox, W.K. Kahl, and J.F. Thomas, A Comparative Assessment of Industrial Boiler Options Relative to Air Emission Regulations, ORNL/TM-8144, Oak Ridge National Laboratory, Oak Ridge, TN, July, 1983.
72. J.F. Thomas, E.C. Fox and W.K. Kahl, Small- to Medium-Size Coal Plants: Description and Cost Information for Boilers and Pollution Control Equipment, ORNL/CF-82/22, ORNL Central Files Report, Oak Ridge National Laboratory, Oak Ridge, TN, March, 1982.

73. C.S. Daw and J.F. Thomas, Coal and Limestone Feed Testing for Atmospheric Fluidized Bed Combustion, ORNL/TM-7724, Oak Ridge National Laboratory, Oak Ridge, TN, September, 1981.
74. M. Olszewski and J.F. Thomas, Experimental Testing and Analysis of a Plastic Panel Heat Exchanger for Greenhouse Heating, ORNL/TM-7151, Oak Ridge National Laboratory, Oak Ridge, TN, February, 1980.
75. J.F. Thomas and R.L. Graves, Economic Evaluation of an Indirectly-Fired AFBC Gas Turbine Cogeneration System - Addendum to ICOP Study, ORNL/CF-82/15, Oak Ridge National Laboratory, March, 1982.
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77. J.F. Thomas, Currently Available Coal Gasification Processes, ORNL/CF-78/383, Oak Ridge National Laboratory, Dec. 7, 1978.
78. J. F. Thomas, "Development of an Atmospheric Pulverized-Coal Cyclone Combustor: Mathematical Modeling and Preliminary Experimental Results", M.S. Mechanical Engineering Thesis, Purdue University, West Lafayette, IN, December, 1978.
79. P.E George, R.C. Lenzer, J.F. Thomas, J.S. Barnhart, N.M. Laurendeau, Gasification in Pulverized Coal Flames, Second Annual Progress Report, FE-2029-6, Purdue University, West Lafayette, IN, August, 1977.
80. F.P. Incropera and J.F. Thomas, A Model for Oxygen and Biomass Production in a Mass Algal Culture, Technical Report No. 84, Water Resources Center, Purdue University, West Lafayette, IN, January, 1977.
81. R.C. Lenzer, P.E George, J.F. Thomas, J.S. Barnhart, N.M. Laurendeau, Gasification in Pulverized Coal Flames, First Annual Progress Report, FE-2029-4, Purdue University, West Lafayette, IN, July, 1976.

Customer/Industry Reports. Letter, and Internal Reports

82. John F. Thomas, Brian H. West and Shean P. Huff, Green Car Congress “ORNL researchers quantify the effect of increasing highway speed on fuel economy.” ORNL/LTR-2013/29, Fuels, Engines and Emissions Research Center, Oak Ridge National Laboratory, 1/17/2013. DOI:10.13140/RG.2.2.12380.18562
83. Study of Optimization of Flexible Fueled Vehicles to Use E-85 Fuel and the Impact on Fuel Efficiency Report to Congress, March 31, 2011, United States Department of Energy, Washington, DC [several ORNL staff were “ghost” writers for the important content of this report].
84. John Thomas, Andrea Strzelec Eric Nafziger, Jae-Soon Choi, John Storey, Teresa Barone Characterization of Oxidation Kinetics for B20 vs. B0 Soot, Work for Others project for Detroit Diesel Corporation, Sept., 2009
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