

Thomas C. Ho, Aldredge Endowed Chair  
Regents' Professor and Chair

Dan F. Smith Departments of Chemical Engineering, Lamar University

P.O. Box 10053, Beaumont, TX 77710

Phone: (409) 880-8790 Fax: (409) 880-2197

E-mail: [Thomas.ho@lamar.edu](mailto:Thomas.ho@lamar.edu)

EDUCATION

Ph.D. 1982 Chemical Engineering, Kansas State University, Manhattan, Kansas

M.S. 1978 Chemical Engineering, Kansas State University, Manhattan, Kansas

B.S. 1973 Chemical Engineering, National Taiwan University, Taipei, Taiwan

POSITIONS HELD

Director, Texas Air Research Center, 2013-present

Fluidization: Hydrodynamics, Solids Mixing, Mass and Heat Transfer, Coal  
Combustion/Gasification, Waste Incineration  
Process Modeling: Ozone/Particulate Matter Modeling, Neural Networks Modeling,  
Reaction Equilibrium & Kinetic Modeling

## PROFESSIONAL SOCIETIES

Registered Professional Engineer in Texas (Serial Number 61620)  
Committee Member - AIChE National Fluidization Committee (Chair: 2003-2005)  
Editorial Board Member Journal of Environmental Progress  
Committee Member - ASME National Industrial Waste Committee  
Committee Member - International Incineration Conf. Program Advisory Committee

75. Flare Speciation and Air Quality Modeling SEP , \$64,000, TCEQ-SEP Phase III , T. Ho (PI) with D. Chen and H. Lou (Co-PIs), submitted for 2/1/2014 - 1/31/2015.
74. Flare Minimization and Air Quality Modeling SEP , \$83,150, TCEQ-SEP Phase II, T. Ho (PI) with Q. Xu (Co-PI), 6/21/2012 - 9/30/2013.
73. Dispersion Modeling Support for SO<sub>2</sub> State Implementation Plan Development," \$24,000, TCEQ, T. Ho (PI), 12/09/2011 - 8/31/2012.
72. Refinements to Cloud Assimilation into the Weather Research and Forecasting (WRF) Model, \$75,000, TCEQ, T. Ho (PI), 6/27/2011 - 5/31/2012.
71. Assessment of the Impact of Airborne Particulate Pollutants on the Rio Grande Basin Watershed, \$121,000, USDA through Sul Ross University, T. Ho (PI) with H. Chu, J. Lin, Q. Qin and P. Chiou (Co-PI), 7/1/2008-6/30/2012.
70. Impact of Global Climate Change on the Precipitation and Acid Deposition in the Rio Grande River Region, \$105,000, USGA through Sul Ross University, J. Lin (PI) with T. Ho and H. Chu (Co-PI), 7/1/2008-6/30/2012.
69. Southeast Texas Air Quality Improvement , \$110,000, TCEQ-SEP, T. Ho (PI) with H. Lou and D. Chen (Co-PI), 1/15/2011 - 6/30/2012.
68. Safety-Considered Proactive Emission Source Reduction and Characterization for Chemical Industries, TARC, \$23,500, Q. Xu (PI) with H. Lou and T. Ho (Co-PI), 09/01/2010 - 08/31/2012.
67. Photochemical Modeling Support, TCEQ, \$24,000, T. Ho (PI), 2/1/2011 - 11/30/2011.
66. Fiscal Year 2010 Rider 8 Grantee Work Plan, Task 4: Air Quality Modeling Planning for FY2011, SETRPC, \$30,000, T. Ho (PI), 10/24/2010 - 12/31/2010.
65. Cloud Assimilation into the Weather Research and Forecast (WRF) Model, TCEQ, \$200,000, T. Ho (PI), 2/15/2010 - 2/28/2011.
64. Photochemical Modeling Support, \$60,000 from TCEQ, 12/23/2009 - 12/31/2010.
63. Assessment of the Impact of Airborne Particulate Pollutants on the Rio Grande Basin Watershed, \$56,000 from USDA (United State Department of Agriculture) through Sul Ross University, 4 Co-PIs (Ho, Chu, Lin and Chiang), 7/1/2009-6/30/2010.
62. GOES Data Assimilation into CAMx to Improve Cloud Fields, \$70,000 from TCEQ, TCEQ grant subcontracted to University of Alabama - Huntsville, 2/1/2009 - 8/31/2009.
61. Photochemical Modeling Support, \$73,429 from TCEQ, 2 Co-PIs (Ho and Lin), 1/7/2009 - 7/31/2009.

60. Assessment of the Impact of Airborne Particulate Pollutants on the Rio Grande Basin Watershed, \$65,000 from USDA (United State Department of Agriculture) through Sul Ross University, 4 Co-PIs (Ho, Chu, Lin and Chiang), 7/1/2008-6/30/2009.
59. Air Quality Modeling of TexAQS-II Episode with Data Assimilation, \$33,700 from HARC through University of Houston, 3 Co-PIs (Ho, Chu, and Lin), 8/1/2008 8/31/2009.
58. State Implementation Plan (SIP) Modeling Support and the Community Multi-scale Air Quality (CMAQ) Modeling System Development and Training, \$75,000 from TCEQ, 4 Co-PIs (Ho, Chu, Lin, and Wang), 11/1/2007 8/31/2008.
57. Top Down Emissions Verification of Petrochemical Sources in Houston, \$92,000 from TCEQ, TCEQ grant subcontracted to University of Alabama Huntsville, 9/1/2007 4/30/2008.
56. Characterization of East Texas Air Quality for the TexAQS II, \$160,108 from EPA, EPA grant subcontracted from University of Houston, 4 Co-PIs (Ho, Lin, Chu and Tadmor), 4/1/2007 3/30/2009.
55. CMAQ Regional Haze Modeling and Further Modeling System Development at TCEQ, \$165,000 from TCEQ, 5 Co-PIs (Ho, Chiou, Chu, Lin, and Tadmor), 2/1/2007-8/31/2007.
54. Top Down Emission Verification of Petrochemical Sources, \$115,000 from TCEQ, TCEQ Grant subcontracted to University of Alabama Huntsville, 4/12/2007 8/31/2007.
53. Acquisition of a Scanning Electron Microscopy/Energy Dispersive X-Ray Spectroscopy System for Multi-disciplinary Research and Education, \$169,270 from NSF (National Science Foundation), 5 Co-PIs (Ho, Chu, Gossage, Lin and Tadmor), 9/1/2006-8/31/2009.
52. Comprehensive Chemical Transport Models of Atmospheric Mercury, \$25,000 from US EPA, 3 Co-PIs (Lin, Chu and Ho), 10/1/2006 9/30/2007.
51. Assessment of the Impact of Airborne Particulate Pollutants on the Rio Grande Basin Watershed, \$65,000 from USDA (United State Department of Agriculture) through Sul Ross University, 4 Co-PIs (Ho, Chu, Fang, and Lin), 7/1/2006-6/30/2007.
50. Study of CaSO<sub>4</sub> Fouling and Calcium Recovery from Brine in the Reverse Osmosis Desalination of Brackish Groundwater in the Rio Grande Basin, \$45,000 from USDA through Sul Ross University, 3 Co-PIs (Lin, Chu and Ho), 7/1/2006 6/30/2007.

49. Simulations of the Emission, Transport, Chemistry and Deposition of Atmospheric Mercury in the Upper Gulf Coast Region, \$150,000, 3 Co-PIs (Lin, Chu and Ho) from GCHSRC, 12/1/2003 to 5/31/2007.
48. Development of Microwave-Enhanced Adsorption/Destruction Technology for Concerned Air Pollutants, \$150,000, 3 Co-PIs (Chu, Ho, and Lin) from GCHSRC, 12/1/2003 to 5/31/2007.
47. Development of Modeling and Field Measurement Infrastructure for Regional Haze Analyses, \$57,000 from TARC (Texas Air Research Center), 6 Co-PIs (Ho, Chu, Gossage, Lin and Tadmor), 12/1/2005 to 12/31/2006.
46. Further CMAQ Deposition Schemes Comparison and System Development at TCEQ, \$165,000 from TCEQ (Texas Commission on Environmental Quality), 5 Co-PIs (Ho, Chiou, Chu, Lin, and Wang), 11/07/2005-11/30/2006.
45. Low-Cost Control of NOx, VOC  
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35. Acquiosition of a High Sensibialit( G/MSd System)841(  
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37. Study of CaSO<sub>4</sub> Fouling and Calcium Recovery from Brine in the Reverse Osmosis Desalination of Brackish Groundwater in the Rio Grande Basin, \$40,000 from USDA through Sul Ross University, 3 Co-PIs (Lin, Ho and Chu), 7/1/2005 6/30/2006.
36. Development of Modeling and Field Measurement Infrastructure for Regional Haze Analyses, \$74,000 from TARC, 6 Co-PIs (Ho, Chu, Gossage, Lin, Tadmor, and Wang), 11/1/2004 10/31/2005.
35. Further Development of CMAQ Model- Mercury Modeling, \$75,000 from TCEQ, 4 Co-PIs (Ho, Chu, Chiou and Lin), 12/15/2004 to 8/31/2005.
34. CMAQ Air Quality Forecasting, \$40,000 from HARC (Houston Advanced Research Center) through University of Houston, 4 Co-PIs (Ho, Chu, Chiou and Lin), 12/15/2004 to 8/31/2005.
33. Acquisition of a Thermal Analysis System for Multidisciplinary Research and Educational Projects, \$85,975 from NSF, 5 Co-PIs (Cocke, Chen, Ho, Li, Lumpkin), 8/1/2002 to 7/31/2005.
32. Assessment of the Impact of Airborne Particulate Pollutants on the Rio Grande Basin Watershed, \$26,250 from USDA through Sul Ross University, 3 Co-PIs (Ho, Chu and Lin), 7/1/2004 6/30/2005.
31. Characterization of Water pollution and Evaluation of Treatment Technologies including Membrane Filtration for the Polluted Water in the Rio Grande Basin, \$40,833 from USDA through Sul Ross University, 3 Co-PIs (Lin, Chu and Ho), 7/1/2004 6/30/2005.
30. Acquisition of an X-ray Fluorescence Spectrometer for Multi-disciplinary Research Projects, \$99,875 from NSF, 5 Co-PIs (Ho, Chen, Chu, Cocke, and Lin), 9/1/2001-8/31/2004.
29. Acquisition of X-ray Diffraction (XRD) Systems for Interdisciplinary Materials Research, \$250,000 from NSF, PI (Cocke) and 4 Co-PIs (Allin, Ho, Li, and Lumpkin), 9/1/2001-8/31/2004.
28. Satellite Assimilation in Meteorological and Air Quality Models for the TEXAQS2000 Study Period, \$60,500 from TCEQ and TARC, 3 Co-PIs (Ho, Chu and Lin), 9/01/2002 to 8/31/2004.
27. Characterization of Airborne Particulate Matter in a Heavily Industrialized Community, \$132,000 from TARC, 6 Co-PIs (Ho, Chen, Chu, Cocke, Lin and Tadmor), 12/04/2002 to 12/03/2004.
26. Development of Texas Emission Inventory Preparation System for SMOKE, \$25,000 from TARC through University of Houston, 4 Co-PIs (Ho, Chiou, Chu and Lin), 9/1/2003 to 8/31/2004.

25. CMAQ One-Atmosphere Modeling, \$100,000 from TCEQ, 4 Co-PIs (Ho, Chiou, Chu, and Lin), 12/09/2003 to 8/31/2004.
24. Satellite Assimilation in Meteorological and Air Quality Models for the TexAQS 2000 Study Period, \$15,000 from TCEQ, 4 Co-PIs (Ho, Chiou, Chu and Lin), 1/06/2004 to 8/31/2004.
23. CMAQ One Atmosphere Modeling: Mercury Deposition in Texas, \$90,000 from the Texas Commission on Environmental Quality, 5 Co-PIs (Ho, Chiou, Chu, Lin and Tadmor), 6/1/2004 to 8/31/2004.
22. Ammonia Nitridation, \$40,000 from Du Pont, PI (Ho), 12/15/2002 to 8/31/2004.
21. Science Assessment of CAMx and CMAQ: I. Model Input and Algorithm Comparisons, \$86,250, TCEQ Grant subcontracted to University of Houston, 12/15/2003-8/31/2004.
20. Towards Better Characterizations of Atmospheric Boundary Layer Turbulence in the Houston/Galveston Region: II. Model Evaluation and Improvement, \$35,751, TCEQ Grant subcontracted to University of Alabama, 3/15/2004-8/31/2004.
19. Micrometeorological Flux Measurements in Preparation of TexAQS II, \$39,261, TCEQ Grant subcontracted to University of Houston, 6/3/2004-8/31/2004.
18. Classification of HRVOC Emission Points in the HGB Non-attainment Area, \$100,000, TCEQ Grant subcontracted to URS, 6/1/2004-8/31/2004.
17. Characterization of Airborne Particulate Matter in a Heavily Industrialized

12. Characterization of Ambient and Indoor Particulate Contaminants in a Heavily Industrialized Community, \$104,896 from GCHSRC, 2 Co-PIs (Ho and Chu), 9/1/2000 to 8/31/2002.
11. Field and Mechanistic Studies for Texas Upper Gulf Coast Air Quality, \$220,300 from TARC, 6 Co-PIs (Ho, Chen, Chu, Cocke, Gossage, and Lin), 12/1/2000-11/30/2002.
10. Ammonia Nitridation, \$34,500 from Du Pont, PI (Ho), 9/1/2000 to 12/15/2002.
9. Fundamental and Kinetic Investigation of Sorbent Technology for Optimum Mercury Emission Control, \$150,187 from GCHSRC, PI (Ho), 9/1/2000 to 8/31/2002.
8. Identification of Emission Source and Migration Pattern of Ambient Particulate Matter, \$96,000 from THWRC (Texas Hazardous Waste Research Center), PI (Ho), 9/1/1998 to 12/31/2000.
7. Sorbent Technology for Multipollutant Control during Fluidized Bed Incineration, \$178,520 from GCHSRC, PI (Ho), 6/1/1995- 4/15/1999.
6. Metal Emission Control during Coal Combustion, \$172,385 from US DOE (Department of Energy) through University Coal Research Program, PI (Ho), 7/1/1994-2/28/1998.
5. Metal Ion Removal from Waste Water, \$15,000 from Du Pont, PI (Ho), 2/1/1996 to 1/31/1997.
4. Photocatalytic Oxidation of NO<sub>x</sub> and Recovery as Nitric Acid, \$154,320 GCHSRC, 2 Co-PIs (Chen and Ho), 6/1/1994-12/31/1997.
3. Development of Two-Stage Fluidized Bed Thermal Treatment Technology for Improved Metal Emission Control, \$144,825 from GCHSRC, PI (Ho), 6/1/1992 - 5/31/1995.
2. Optimization and Evaluation of Thermal Treatment Technology, \$85,007 from US DOE Office of Technology Development, PI (Ho), 7/1/1993-10/31/1994.
1. Novel Technology for Metal Emission Control, \$82,007 from state of Texas through the 1990 Advanced Technology Program, PI (Ho), 1/1/1991-12/31/1993.

#### HANDBOOK CHAPTER CONTRIBUTIONS

1. T. C. Ho, "Basic Combustion and Incineration," Chapter 2.2 in *Handbook of Environmental Engineering Calculations* edited by C. C. Lee and Shun Dar Lin, McGraw-Hill, New York, NY, ISBN 0-07-038183-6 (2000).
2. T. C. Ho, Incompressible Flow, Chapter 8 in *Fluid Flow Handbook* edited by Dr. Jamal



- Saleh, McGraw-Hill, New York, NY, ISBN 0-07-136372-6 (2002).
3. T. C. Ho, Modeling, Chapter 9 in the *Handbook of Fluidization and Fluid-Particle Systems* edited by Dr. W. C. Yang, Marcel Dekker, Inc., New York, NY, ISBN: 0-8247-0259-X, p.239-255 (2003).
  4. T. C. Ho, Mass Transfer, Chapter 11 in the *Handbook of Fluidization and Fluid-Particle Systems* edited by Dr. W. C. Yang, Marcel Dekker, Inc., New York, NY, ISBN: 0-8247-0259-X, p.287-307 (2003).
  5. L. Y. Lin and T. C. Ho, Control of Heavy Metals in Emission Streams, Chapter 5 in *Advanced Air and Noise Pollution Control* edited by L. K. Wang, Volume 2 of *Handbook of Environmental Engineering*, Humana Press, Totowa, New Jersey, ISBN 1-59259-779-3 (2005).

3. Fan, L. T., Tho-Ching Ho, N. Yutani and W. P. Walawender, "Statistical Study of the Frequency of Free Bubbling in a Shallow Gas-Solid Fluidized Bed," in Fluidization IV, Fourth International Conference on Fluidization, p. 1-3-1, Kashikojima, Japan, May 29-June 3, 1983.
4. Yutani, N., Tho-Ching Ho and L. T. Fan, "Statistical Study of the Jet Zone Behavior in a Shallow Gas-Solid Fluidized Bed Using a Mini-Capacitance Probe," *Chemical Engineering Science*, **38**, 575 (1983).
5. Yutani, N., Tho-Ching Ho and L. T. Fan, "The Bubble Behavior in the Gas-Bubble Fluidized Bed," *Can. J. Chem. Engg.*, **61**, 121 (1983).
6. Ho, Tho-Ching, N. Yutani, L. T. Fan and W. P. Walawender, "The Onset of Slugging in a Gas-Solid Fluidized Bed," *Powder Technology*, **35**, 249 (1983).
7. Ho, Tho-Ching, N. Yutani, L. T. Fan and W. P. Walawender, "Stochastic Modeling of the Formation of Bubbles in a Shallow Gas-Solid Fluidized Bed," *Can J. Chem. Engg.*, **61**, 654 (1983).
8. Ho, Tho-Ching, T. K. Chen, and J. R. Hopper, "Pressure Drop across the Distributor in Fluidized Beds with Regular and Irregular Distributor Design," *AIChE Symp. Series*, **80**, No. 241, 34 (1984).
9. Ho, Tho-Ching, Hom-Ti Lee, and J. R. Hopper, "Simulation of Desulfurization in a Fluidized Bed Limestone Reactor," *AIChE J.*, **32**, 1754 (1986).
10. Ho, Tho-Ching, R. C. Wang, and J. R. Hopper, "Characteristics of Grid Zone Heat Transfer in a Gas-Solid Fluidized Bed," *AIChE J.*, **33**, 843 (1987).
11. Ho, Tho-Ching, S. J. Yau, and J. R. Hopper, "Hydrodynamics of Semifluidization in Gas-Solid Systems," *Powder Technology*, **50**, 25 (1987).
12. Ho, Tho-Ching, [1 TD .00P15swization in a

21. Ho, T. C., J. M. Chen and J. R. Hopper, "Novel Fluidized Bed Technology for Metal Emissions Control During Waste Incineration," Proceedings of the Second Asian Conference on Fluidized Bed and Three-Phase Reactors, p. 136, Kenting, Taiwan, February 18-20, 1990.
22. Ho, T. C., J. M. Chen, S. Shukla and J. R. Hopper, "Metal Capture During Fluidized Bed Incineration of Solid Wastes," AIChE Symp. Series, **86**, No. 276, 51 (1990).
23. Ho, T. C., L. Tan, C. H. Chen and J. R. Hopper, "Characteristics of Metal Capture during Fluidized Bed Incineration," AIChE Symp. Series, **87**, No. 281, 118 (1991).
24. Ho, T. C., R. C. Wang and J. R. Hopper, "Grid-Region Heat Transfer in a Gas-Solid Fluidized Bed," Journal of Chinese Inst. of Chem. Eng., **22**, 345 (1991).
25. Ho, T. C., C. Chen, J. R. Hopper and D. Oberacker, "Characteristics of Metal Capture in Fluidized Bed Incinerators and Waste Heat Boilers," Proceedings of the Seventh International Fluidization Conference, p. 463, Broadbeach, Australia, May 3-8, 1992.
26. Ho, T. C., M. W. Lin and J. R. Hopper, "Heat Transfer in Gas-Liquid-Solid Fluidized Beds Equipped with Inline Static Mixers," Proceedings of the Third Asian Conference on Fluidized-Bed and Three-Phase Reactors, p. 324, Kyong-Ju, Korea, May 31-June 4, 1992.
27. Ho, T. C., H. T. Lee, J. R. Hopper and Yu-Min Chang, "Metal Behavior During Fluidized Bed Thermal Treatment of Metal-Contaminated Soil," Proceedings of the Third Asian Conference on Fluidized-Bed and Three-Phase Reactors, p. 574, Kyong-Ju, Korea, May 31-June 4, 1992.
28. Ho, T. C., C. H. Chen, J. R. Hopper and D. Oberacker, "Metal Capture During Fluidized Bed Incineration of Wastes Contaminated with Lead Chloride," Combustion Science and Technology, **85**, 101 (1992).
29. Hopper, J. R., C. L. Yaws, M. Vichailak, and T. C. Ho, "Waste Minimization by Process Modification," in Industrial Environmental Chemistry, Plenum Press, New York, pp. 25-43, 1992.
30. Ho, T. C., H. W. Chu, and J. R. Hopper, "Metal Volatilization and Separation during Incineration," Waste Management, **13**, 455 (1993).
31. Ho, T. C., C. Lin, H. T. Lee, and J. R. Hopper, "Characteristics of Lead and Cadmium Capture by Sorbent during Fluidized Bed Combustion," Proceedings of the 12th International Conference on Fluidized Bed Combustion, **1**, 31 (1993).
32. Hopper, J. R., C. L. Yaws, M. Vichailak, and T. C. Ho, "Waste Minimization by Process Modification," Waste Management, **13**, 3 (1993).
33. Ho, T. C., H. T. Lee, T. H. Kuo, D. Chen, and W. D. Bostick, "Analysis of Incinerator Performance and Metal Emissions from Recent Trial and Test Burns," Hazardous Waste & Hazardous Materials, **11**, No. 1, 53-70 (1994).
34. Ho, T. C., M. J. Ke, F. Chen, H. Chu, and J. R. Hopper, "Metal Retention by Sorbents in a Simulated Waste Heat Boiler," Proceedings of the 1994 International Incineration Conference held in Houston, pp. 559-562, May 9-13, 1994.
35. Ho, T. C., H. T. Lee, H. W. Chu, J. R. Hopper, and W. D. Bostick, "Metal Capture by Sorbents during Fluidized Bed Combustion," Fuel Processing Technology, **39**, 373 (1994).
36. Ho, T. C., L. F. Tsau, J. R. Hopper, W. D. Bostick, and D. P. Hoffmann, "Transformation of Chromium from Cr(III) to Cr(VI) in a Simulated Wet Scrubber," Proceedings of the 1995 International Incineration Conference held in Bellevue, Washington, pp. 569-573,

- May 8-12, 1995.
37. Ho, T. C., R. Ramanarayan, J. R. Hopper, W. D. Bostick, and D. P. Hoffmann, "Lead and Cadmium Capture by Various Sorbents during Fluidized Bed Combustion/Incineration," Proceedings of the 8th International Fluidization Conference held in Tours, France, pp. 899-906, May 14-19, 1995.
  38. Wang, R. C., W. C. Cho, and T. C. Ho, "Modeling of Grid Region Heat Transfer in a Shallow Gas-Solid Fluidized Bed," *Can. J. of Chem. Eng.*, **73**, 66 (1995).
  39. Ho, T. C., H. T. Lee, C. C. Shiao and J. R. Hopper, "Metal Behavior during Fluidized Bed Thermal Treatment of Soil," *Waste Management*, **15**, 325 (1995).
  40. Ho, T. C., C. Shie, K. Wang and J. R. Hopper, "Effect of Chlorine and Sulfur on Metal Capture by Sorbents During Fluidized Bed Incineration," Proceedings of the 1996 International Incineration Conference held in Savannah, Georgia, pp. 415-422, May 6-10, 1996.
  41. Lee, H. T., T. C. Ho and C. C. Hsiao, "Dynamic Volatilization Characteristics of Heavy Metals During the Thermal Treatment of Contaminated Soil," Proceedings of the Fifth Asian Conference on Fluidized-Bed & Three-Phase Reactors held in Hsitou, Taiwan, pp. 200-206, December 16-20, 1996.
  42. Ho, T. C., A. N. Ghebremeskel, K. S. Wang and J. R. Hopper, "Trace Metal Capture by Various Sorbents During Fluidized Bed Coal Combustion," Proceedings of the Fifth Asian Conference on Fluidized-Bed & Three-Phase Reactors held in Hsitou, Taiwan, pp. 207-212, December 16-20, 1996.
  43. Ho, T. C., T. H. Kuo, and J. R. Hopper, Trace Metal Capture by Various Sorbents during Fluidized Bed Coal Combustion, Proceedings of the 22<sup>nd</sup> International Conference on Coal Utilization & Fuel Systems held in Clearwater, FL, March 16-19, pp. 877-888 (1997).
  44. Ho, T. C., K. S. Wang, S. Rajagopalan and J. R. Hopper, "Metal Vaporization and Metal Binding by Additives or Sorbents during High Temperature Thermal Treatment," pp. 761-768, Proceedings of the 1997 Incineration Conference held in Oakland, CA, May 12-16, 1997.
  45. Ho, T. C., A. R. Ghai, F. Guo, K. S. Wang, and J. R. Hopper, Adsorption and Desorption of Mercury on Sorbents at Elevated Temperatures, *Combustion Science and Technology*, **134**, 263-289 (1998).
  46. Ho, T. C., P. Yang, K. S. Wang and J. R. Hopper, Characteristics of Mercury Desorption from Spent Sorbents during Regeneration at Elevated Temperatures, Proceedings of the 1998 International Incineration Conferences held in Salt Lake City, Utah, May 11-15, pp.709-714 (1998).
  47. Ho, T. C., P. Yang, T. H. Kuo, and J. R. Hopper, Characteristics of Mercury Desorption from Sorbents at Elevated Temperatures, *Waste Management*, **18**, 445-452 (1998).
  48. Ho, T. C., K. S. Wang, C. C. Shie, and J. R. Hopper, Simultaneous Sulfur and Metal Capture by Lime during Fluidized Bed Coal Combustion, Proceedings of the 9<sup>th</sup> Engineering Conference on Fluidization held in Durango, CO, May 17-22, pp. 749-756 (1998).
  49. Chu, H. W., B. Limsakul, T. H. Kuo and T. C. Ho, Statistical Analysis for Temporal and Spatial Variations of PM<sub>10</sub> Measurements in Southeast Texas, proceedings of the 1999 International Conference on Industry, Engineering, and Management Systems held in Cocoa Beach, FL, March 8-10, pp. 460-465 (1999).

50. Ho, T. C., T. H. Kuo and J. R. Hopper, Thermodynamic Study of the Behavior of Uranium and Plutonium during Thermal Treatment under Reducing and Oxidizing Modes, *Waste Management*, **20**, 355-361 (2000).
51. Ho, T. C., T. C. Chuang, S. Chelluri, K. Kobayashi, and J. R. Hopper, Capture of Metal, Sulfur and Chlorine by Various Sorbents during Fluidized bed Incineration, pp. 12-036 to 12-040, Proceedings of the Third Joint China/USA Chemical Engineering Conference held in Beijing, China, Sept. 25-28, 2000.
52. Chu, H. W., B. Limsakul, T. H. Kuo and T. C. Ho, Statistical Analysis of Airborne Particulate Matter in the Houston Metropolitan Area, pp. 369-374, Proceedings of the 2000 International Conference on Industry, Engineering, and Management Systems held in Cocoa Beach, FL, March 13-15, 2000.
53. Ho, T. C., T. C. Chuang, S. Chelluri, Y. Lee, and J. R. Hopper, Simultaneous Capture of Metal, Sulfur, and Chlorine by Sorbents during Fluidized Bed Incineration, *Waste Management*, **21**, 435 (2001).
54. Ho, T. C., N. Kobayashi, Y. K. Lee, C. J. Lin, and J. R. Hopper, Semi-fluidized Bed Application for Mercury Emission Control during Combustion, pp. 699-705, Proceeding of the 10<sup>th</sup> International Fluidization Conference held in Beijing, China, May 20-25, 2001.
55. Chu, H. W., U. Tosirisuk, B. Limsakul, V. Zaloom, and T. C. Ho, "Using Linear Goal Programming to Solve Chemical Mass Balance Model," paper accepted for proceedings publication by the 2001 International Conference on Information Systems in Engineering and Construction held in Cocoa Beach, FL, June 7-8, 2001.
56. Chu, H. W., U. Tosirisuk, B. Limsakul, V. Zaloom, and T. C. Ho, "Analysis of the Effect of Air Transport on PM<sub>2.5</sub> Using NOAA HYSPLIT4 through Internet Applications," paper accepted for proceedings publication by the 2001 International Conference on Information Systems in Engineering and Construction held in Cocoa Beach, FL, June 7-8, 2001.
57. Ho, T. C., N. Kobayashi, Y. K. Lee, C. J. Lin, and J. R. Hopper, Modeling of Mercury Sorption by Activated Carbon in a Confined, a Semi-Fluidized, and a Fluidized Bed, *Waste Management*, **22**, 391 (2002).
58. Ho, T. C., N. Kobayashi, Y. Lee, J. Lin, and J. R. Hopper, Experimental and Kinetic Study of Mercury Adsorption on Various Activated Carbons in a Fixed Bed Adsorber, paper published in the CD Proceedings of the 2002 International Incineration Conference held in New Orleans, May 13-17, 2002.
59. Ho, T.C., S. Annareddy, Y. Lee, H. Chu, J. Lin, and V. Zaloom, Neural Network Application for Analyzing the Performance of a Complex Industrial Process, paper published in the CD Proceedings of the 2002 International Conference on Information Systems in Engineering and Construction held in Cocoa Beach, FL, June 12-14, 2002.
60. Zhang, W. R., H. W. Chu, and T. C. Ho, An Information System Approach to Multiagent Neural-Fuzzy Sensing/Control, paper published in the CD Proceedings of the 6<sup>th</sup> World Multiconference on Systemics, Cybernetics, and Informatics held in Orlando, FL, July 14-18, 2002.
61. Ho, T.C., Y. Lee, N. Kobayashi, J. R. Hopper, and J. Lin, Measurement and Modeling of Elemental Mercury Sorption on Various Activated Carbons in a Fixed Bed Absorber, *J. of Chinese Institute of Chemical Engineers*, **34**, 17 (2003).



74. Lin C.-J., Lindberg

87. Pallavkar, Sameer, Tae-Hoon Kim, Dan Rutman, Jerry Lin, and Thomas Ho, Active Regeneration of Diesel Particulate Filter employing Microwave Heating, *Industrial and Engineering Chemistry Research*, **48**, 69 (2009).
88. Chiou P., Tang W., Lin C.-J., Chu H., Ho T.C., Atmospheric Aerosol over a Southeastern Region of Texas: Chemical Composition and Possible Sources, *Environmental Modeling & Assessment*, **14**, 333-350 (2009).
89. Chiou P., Tang W., Lin C.-J., Tadmor R., Chu H., Ho T.C., Comparison of atmospheric aerosols between two sites over Golden Triangle of Texas, *International Journal of Environmental Research*, **3**, 253-270 (2009).
90. Chiou P., Tang W., Lin C.-J., Chu H., Tadmor R., Ho T.C., Atmospheric Aerosol over a Southwestern Region of Texas, *Environmental Modeling and Assessment*, **14**, 645-659 (2009).
91. Chiou P., Shah J., Lin C.-J., Chu H., Tadmor R., Ho T.C., "Source Identification of Houston Aerosol with Carbon Fractions in Positive Matrix Factorization, to appear in *International Journal of Environment and Development*, **7**, 135-152 (2010).
92. Lin C.-J., Pan L., Streets D.G., Shetty S., Jang C., Feng X., Chu H., Ho T., "Estimating Mercury Emission Outflow from East Asia Using CMAQ-Hg," *Atmospheric Chemistry & Physics*, **10**, 1853-1864, 2010.



101. Fu, J., Zhao, C. Y., Xu, Q., T.C. Ho Debottleneck of Multi-stage Material-Handling Processes via Simultaneous Hoist Scheduling and Production Line Retrofit , *Industrial & Engineering Chemistry Research*, **52**(1), 123-133 (2013).
102. Zhu, J. , S. Wei, M. Chen, H. Gu, S. Rapole, T.Ho, J. Hopper and Z. Guo\*; *Magnetic Nanocomposites for Environmental Remediation*, *Advanced Powder Technology*, **24**, 459-467 (2013).
103. Zhu, J., S. Pallavkar, M. Chen, N. Yerra, Z. Luo, H. Colorado, H. Lin, N. Haldolaarachchige, A. Khasanov, T. C. Ho, D. Young, S. Wei\* and Z. Guo\*, *Magnetic Carbon Nanostructures: Microwave Ener*

115. Ge, S. J., Wang, S. J., Xu, Q., T. C. Ho, Impact of Chemical Plant Start-Up Emissions on Ambient Ozone Concentration , Atmospheric Environment, 164, 20-30 (2017).
116. Ge, S. J., Wang, S. J., Xu, Q.\*, T. C. Ho, Study on Regional Air Quality Impact from A Chemical Plant Emergency Shutdown , Chemosphere, 201, 655-666 (2018).
117. Ge, S. J., Wang, S. J., Xu, Q.\*, T. C. Ho, Ozone Impact Minimization through Coordinated Scheduling of Turnaround Operations from Multiple Olefin Plants in An Ozone Nonattainment Area , Atmospheric Environment, 176, 47-53 (2018).
118. Ge, S. J., Wang, S. J., Zhang, J., Xu, Q.\*, T. C. Ho, Modeling and Simulation for Regional Ozone Impact by Flaring Destruction and Removal Efficiency of Oil & Gas Industries , Computer Aided Chemical Engineering, 44, 2185-2190 (2018).
119. Ge, S. J., Zhang, J., Wang, S. J., Xu, Q.\*, T. C. Ho, New Insight of Ozone Pollution Impact from Flare Emissions of Chemical Plant Start-up Operations , Environmental Pollution, 245, 873-882 (2019).