

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

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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
Regents' Professor, Texas State University System, 2007-present
Chair, Department of Chemical Engineering, 2007-present
Director, Texas Hazardous Waste Research Center, 2005-present
Aldredge Endowed Chair, College of Engineering, Lamar University, 2002-present
Director, Gulf Coast Hazardous Substance Research Director, 2002-present
University Professor, Dept. of Chemical Engineering, Lamar University, 2001-present
Professor, Department of Chemical Engineering, Lamar University, 1993-2001
Visiting Scientist, DOE Oak Ridge National Laboratories, Summer 1992
Associate Professor, Chemical Engineering Department, Lamar University, 1987-1993
Assistant Professor, Chemical Engineering Department, Lamar University, 1982-1987

HONORS AND AWARDS

Regent's Professor Award, Texas State University System, 2007
University Scholar Award, Lamar University, 2005
University Professor Award, Lamar University, 2001
Outstanding Service Awards, International Incineration Conf., 1998, 1999, 2000, 2001
Lamar University 1998-1999 Teaching Bonus Award
Lamar University 1996-1997 Teaching Bonus Award
Lamar University 1994-1995 Teaching Bonus Award
Amoco 1993 College of Engineering Outstanding Teaching Award

RESEARCH AREAS

Waste Management: Waste Incineration, Air Toxic Emission Control, Ambient
Particulate Matter, Metal/Mercury Sorption by Sorbents,
Microwave Technology

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
 Committee Member - ASME National Mixed-Waste Treatment Committee
 Task Force Member - Coalition for Responsible Waste Incineration Metal Task Force
 Board Member - AWMA Southeast Texas Section

RESEARCH ACTIVITIES/ACCOMPLISHMENTS

83. SETRPC, “FY16/17 Rider 7 Work Plan - Task 5: Air Quality Modeling Planning,” South East Texas Regional Planning Commission, \$85,000, T. Ho (PI) with Q. Xu (Co-PI), 2/1/16- 8/15/17.
82. “Flare Minimization and Air Quality Modeling SEP”, \$60,452, TCEQ-SEP Phase IV, T. Ho (PI) with Q. Xu (Co-PI), 10/1/2015 - 9/30/2016.
81. TCEQ-SEP Phase III, “Flare Speciation and Air Quality Modeling SEP”, \$64,000, T. Ho (PI) with D. Chen and H. Lou (Co-PIs), 2/1/2014 – 8/31/2015.
80. SETRPC, “FY14/15 Rider 8 Work Plan - Task 4: Air Quality Modeling Planning,” South East Texas Regional Planning Commission, \$70,000, T. Ho (PI) with Q. Xu (Co-PI), 06/1/14- 8/15/15.
79. “Phase II-2 Rider 8 Work Plan - Task 4: Air Quality Modeling Planning,” \$80,000, SETRPC, T. Ho (PI) with Q. Chu (Co-PI), 6/1/2013 – 12/16/2013.
78. “Phase II -1Rider 8 Work Plan - Task 4: Air Quality Modeling Planning,” \$70,000, SETRPC, T. Ho (PI) with Q. Chu (Co-PI), 3/15/2013 – 5/31/2013.
77. “Impact of Flaring Emissions on Regional Air Quality Associated with Chemical Plant Turnaround Operations”, \$43,700, TARC, Q. Xu (PI) with T. Ho (Co-PI), 08/01/12 - 07/31/13.
76. “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.

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 SO₂ 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 CaSO₄ 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 NO_x, VOC and Soot from Stationary Diesel Generators Employing an Adsorptive Ceramic Filter with Microwave Regeneration," \$127,040 from TCEQ-NTRD (New Technology Research and Development), 4 Co-PIs (Ho, Chu, Kim, and Lin), 5/30/2005-11/30/2006.
44. "Collection of Hourly Emissions Data on TCEQ-Specified Pollutants from TCEQ-Selected Industrial Sources," \$86,500, TCEQ Grant subcontracted to URS, 5/30/2006-11/15/2006.
43. "Acquisition of a High Sensibility GC/MS System for Multi-disciplinary Research Projects and Education," \$126,427 from NSF, 5 Co-PIs (Ho, Chen, Chu, Cocke, and Lin), 9/1/2003-8/31/2006.
42. "Point Source and Area Source Control Strategy Catalog Development for the HGB Ozone Non-attainment Area," \$49,950, TCEQ Grant subcontracted to ENVIRON, 2/8/2006-6/30/2006.
41. "Work Plan Analysis On-Call Services," \$69,828, TCEQ Grant subcontracted to Michael Baker, Inc., 9/15/2005-6/30/2006.
40. "Inter-comparison of Comprehensive Chemical Transport Models of Atmospheric Mercury," \$25,000 from US EPA, 3 Co-PIs (Lin, Chu and Ho), 4/1/2005 – 3/31/2006.
39. "Modeling of Mercury Pollutants over the Pacific Regions," \$25,000 from US EPA, 3 Co-PIs (Lin, Chu and Ho), 4/1/2005-3/31/2006.
38. "Assessment of the Impact of Airborne Particulate Pollutants on the Rio Grande Basin Watershed," \$40,000 from USDA through Sul Ross University, 3 Co-PIs (Ho, Chu and Lin), 07/01/2005 – 06/30/2006.

37. “Study of CaSO₄ 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 Community," \$73,000 from TARC, 5 Co-PIs (Ho, Chen, Chu, Cocke, and Lin), 12/04/2002 to 12/03/2003.
16. "Texas Emission Inventory Processing for SMOKE and CMAQ," \$20,000 from HARC subcontract from University of Houston, 4 Co-PIs (Ho Chu, Lin and Underdown), 12/10/2002 to 12/9/2003.
15. "Satellite Assimilation in Meteorological and Air Quality Models for the TEXAQS2000 Study Period," \$34,000 from TARC, 3 Co-PIs (Ho, Chu, and Lin), 9/1/2002 to 8/31/2003.
14. "Development of CMAQ Air Quality Modeling," \$300,000 from TCEQ and TARC, 5 Co-PIs (Ho, Chiou, Chu, Lin, and Tran), 2/27/2002 to 8/31/2003.
13. "Characterization of Ambient and Indoor Particulate Contaminants in a Heavily Industrialized Community," \$140,000 from GCHSRC, 2 Co-PIs (Ho and Chu), 9/1/2001 to 8/31/2003.

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_x 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).

SPECIAL ISSUE GUEST EDITOR

1. Waste Management, Volume 18 (1998).
2. Waste Management, Volume 19 (1999).
3. Waste Management, Volume 20 (2000).
4. Waste Management, Volume 21 (2001).
5. Waste Management, Volume 22 (2002).
6. Environmental Engineering Science, Volume 21, No. 1 (2004).
7. Powder Technology, Volume 151 (2005).
8. Powder Technology, Volume 152 (2006).
9. Journal of the Chinese Institute of Chemical Engineers, Volume 37, No. 5 (2006).
10. Powder Technology, Volume 153 (2007).

OTHER SCHOLARLY ACTIVITIES

1. Conference Presentations – More than 90 presentations conducted.
2. Technical Session Chairpersonship – Numerous Meetings and Conferences.
3. Program Advisory Committee – AIChE Fluidization Committee, International Incineration Conference, ASME Industrial Waste, and Coalition for Responsible Waste Incineration.
4. Proposal and Journal Paper Reviewer – NSF proposal and panel reviewer, DOE, ACS, EPA, Journal, Environmental Progress, Chemical Engineering Science, Powder Technology, Combustion Science and Technology and etc.
5. Thesis and Field Study Major Advisor – 12 doctoral and 32 MES theses completed.

LIST OF JOURNAL/PROCEEDINGS PUBLICATIONS

1. Fan, L. T., Tho-Ching Ho, S. Hiraoka and W. P. Walawender, "Pressure Fluctuations in a Fluidized Bed," *AIChE J.*, **27**, 388 (1981).
2. Fan, L. T., Tho-Ching Ho and W. P. Walawender, "Measurements of the Rise Velocities of Bubbles, Slugs, and Pressure Waves in a Gas-Solid Fluidized Bed Using Pressure Fluctuation Signals," *AIChE J.*, **29**, 33 (1983).

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, M. O. Kirkpatrick, and J. R. Hopper, "Modeling of Solids Mixing in a Coal-Limestone Fluidized Bed," AIChE Symp. Series, **83**, No. 255, 42 (1987).
13. Ho, Tho-Ching, M. O. Kirkpatrick, and J. R. Hopper, "Dynamic Solids Mixing Between Coal and Limestone in a Gas-Solid Fluidized Bed," Chemical Engineering Communications, **60**, 47 (1987).
14. Ho, Tho-Ching, K. N. Ko, C. C. Chang, and J. R. Hopper, "Dynamic Simulation of a Shallow Jetting Fluidized Bed Coal Combustor," Powder Tech., **53**, 247 (1987).
15. Ho, Tho-Ching, P. Ku, and J. R. Hopper, "Kinetic Study of Biological Sludge Incineration in a Fluidized Bed," AIChE Symp. Series, **84**, No. 262, 126 (1988).
16. Peng, S. H., K. Y. Li, and T. C. Ho, "Hydrochlorination of Silicon in a Fluidized Bed Reactor," AIChE Symp. Series, **84**, No. 262, 114 (1988).
17. Ho, T. C., P. Ku, and J. R. Hopper, "Modeling of Biological Sludge Incineration in a Batch Fluidized Bed," Proceedings of the Conferences on Hazardous Waste Research, p. 112, Kansas State University, Manhattan, KS, May 25, 1988.
18. Ho, T. C., M. Kirkpatrick, and J. R. Hopper, "Mixing and Combustion in a Shallow Coal-Limestone Fluidized Bed Combustor," Can. J. Chem. Eng., **67**, 207 (1989).
19. Ho, Tho-Ching, P. Ku, and J. R. Hopper, "Drying and Devolatilization During Fluidized Bed Incineration of Biological Sludge," Fluidization VI, Proceedings of the Sixth Fluidization Conference, p. 393, Banff, Canada, May 7-12, 1989.
20. Li, K. Y., S. H. Peng and T. C. Ho, "Prediction of Silicon-Powder Elutriation in a Fluidized Bed Reactor for the Silane Decomposition Reaction," AIChE Symp. Series, **85**, No. 270, 77 (1989).

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, George, 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 22nd 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 9th 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 PM₁₀ 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, Proceedings of the 10th 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_{2.5} 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 6th 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).

62. Ho, T. C., Y. Lee, H. W. Chu, J. Lin and T. H. Kim, "Microwave Technology for Environmental Applications," paper published in the CD Proceedings of the 2003 International Incineration Conference held in Orlando, Florida, May 12-16, 2003.
63. Lin, C. J., T. C. Ho, H. Chu, T. Erdemli, H. Yang, P. Chiou, and J. R. Hopper, "A Comparative Study of the USEPA NET96 and NEI99 Emission Inventories," Proceedings of CMAQ Users Workshop, Research Triangle Park, NC, October 22-25, 2003.
64. Lin, C. J., T. C. Ho, H. Chu, H. Yang, S. Chandru, N. Krishnarajanagar, P. Chiou, and J. R. Hopper, "Effect of Emission Inventory Changes on the Peak Concentration of Ground-Level Ozone in Southeast Texas," Proceedings of CMAQ Users Workshop, Research Triangle Park, NC, October 22-25, 2003.
65. Ho, T. C., Y. Lee, H. W. Chu, C. J. Lin, and J. R. Hopper, "Modeling of Mercury Desorption from Activated Carbon at Elevated Temperatures under Fluidized/Fixed Bed Operations, paper published in the proceedings of the AIChE 2003 Annual Meeting held in San Francisco, November 16-21, 2003.
66. Ho, T. C., N. Kobayashi, Y. Lee, C. J. Lin, and J. R. Hopper, "Experimental and Kinetic Study of Mercury Adsorption on Various Activated Carbons in a Fixed-Bed Adsorber," Environmental Engineering Science, **21**, 21 (2004).
67. Ho, T. C., Y. Lee, H. W. Chu, C. J. Lin, and J. R. Hopper, "Modeling of Mercury Sorption/Desorption from Activated Carbon at Various Temperatures Under Fluidized/Fixed Bed Operations," paper published in the Proceedings of the 9th Conference on Fluidized-Bed and Three-Phase Reactors held in Wan-Li, Taiwan, pp. 133-138, November 21-24, 2004.
68. Ho, T. C., Y. Lee, H. W. Chu, C. J. Lin, and J. R. Hopper, "Modeling of Mercury Desorption from Activated Carbon at Elevated Temperatures Under Fluidized/Fixed Bed Operations," paper published in the Proceedings of the International Conference on Mercury as a Global Pollutant held in Ljubljana, Slovenia, pp.617-620, June 27-July 2, 2004.
69. Lin C.-J., Lindberg S.E., Yang H., Ho T. C., and Chu H., "Development of a Prototype Vegetative Hg Emission Processor in BEIS3 for Atmospheric Mercury Modeling," the 7th International Conference on Mercury as a Global Pollutant, Ljubljana, Slovenia, June 2004.
70. Lin C.-J., Ho T. C., Pongprueksa P., Chu H., and Jang C., "Development of Mercury Modeling Schemes Within CMAQ Framework: Science and Model Implementation Issues," Proceedings of 2004 CMAQ Users Workshop, Research Triangle Park, NC, October 2004.
71. Lin C.-J., Lindberg S.E., Ho T. C., Yang H., Chu H., Krishnarajanagar N., and Jang C., "Preparation of Biogenic Mercury Emission Using BEIS3 - Prototype Development and Preliminary Processing," Proceedings of 2004 CMAQ Users Workshop, Research Triangle Park, NC, October 2004.
72. Ho, T. C., Y. K. Lee, H. Chu, C. J. Lin, and J. R. Hopper, "Modeling of Mercury Desorption from Activated Carbon at Elevated Temperatures under Fluidized/Fixed Bed Operations," Powder Technology, **151**, 54 (2005).
73. Ho, T.C., Lee Y. K., Lin C.-J., Kobayashi N., and Hopper J. R., "Mercury Emission Control from Combustion Flue Gas Employing Semi-Fluidized Bed Activated Carbon Adsorption," Journal of Chinese Institute of Chemical Engineers, **36**, 285 (2005).

74. Lin C.-J., Lindberg S. E., Ho T. C. and Jang C., "Development of a Processor in BEIS3 for Vegetative Mercury Emission Processing in the Continental United States," *Atmospheric Environment*, **39**, 7529 (2005).
75. Lin C.-J., Ho T. C., Chu H., Yang H., Mojica M. J., Krishnarajanagar N., Chiou P., and Hopper J. R., "A Comparative Study of US EPA 1996 and 1999 Emission Inventory in West Gulf Coast of Mexico Region, USA ," *Journal of Environmental Management*, **75**, 315 (2005).
76. Lin C.-J., Ho T. C., Chu H., Yang H., Chandru S., Krishnarajanagar N., Chiou P., and Hopper J. R., "Sensitivity of Ground-Level Ozone Formation to Emission Adjustments in Southeast Texas Cities," *Journal of Environmental Management*, **75**, 303 (2005).
77. Kim, T. H., H. Rupani, S. Pallavkar, J. R. Hopper, C. J. Lin and T. C. Ho, "Destruction of Toxic Volatile Organic Compounds (VOCs) in a Microwave-Assisted Catalyst Bed," *Journal of Chinese Institute of Chemical Engineers*, **37**, 519 (2006).
78. Pongprueksa, P., C. J. Lin and T. C. Ho, "Sensitivity Evaluation of Gas phase Reduction Mechanism of Divalent Mercury using CMAQ-Hg in a Continental US Domain," proceedings of the Fifth Annual CMAS (Community Modeling and Analysis System) Conference held at the Friday Center, UNC-Chapel Hill, October 16-18, 2006.
79. Lin, C. J., P. Pongprueksa, T. Vanjani, T. C. Ho, H. W. Chu, C. Jang, D. G. Street, and J. S. Fu, "Trans-Pacific Chemical Transport of Mercury: Sensitivity Analysis on Potential Asian Emission Contribution to Mercury Deposition in North America Using CMAQ-Hg," proceedings of the Fifth Annual CMAS (Community Modeling and Analysis System) Conference held at the Friday Center, UNC-Chapel Hill, October 16-18, 2006.
80. Lin C.-J., Pongprueksa P., Bullock O.R., Lindberg S.E., Pehkonen S.O., Jang C., Braverman T., Ho T.C., "Scientific Uncertainties in Atmospheric Mercury Models II: Sensitivity Tests over the Continental United States," *Atmospheric Environment* **41**, 6544-6560, 2007.
81. Pour-Biazar A., McNider R.T., Roselle S.J., Suggs R., Jedlovec G., Byun D.W., Kim S., Lin C.-J., Ho T.C., Haines S., Dornblaser B., Cameron R., "Correcting Photolysis Rates on the Basis of Satellite Observed Clouds," *Journal of Geophysical Research – Atmosphere* **112** (D10): D10302, 2007.
82. Pongprueksa P., Lin C.-J., Lindberg S.E., Jang C., Braverman T., Bullock O.R., Ho T.C., Chu H., "Scientific Uncertainties in Atmospheric Mercury Models III: Boundary and Initial Conditions, Model Grid Resolution, and Hg(II) Reduction Mechanism," *Atmospheric Environment*, **42**, 1828-18451 (2008).
83. Chiou P., Tang W., Lin C.-J., Tadmor R., Chu H., Ho T.C., "Atmospheric Aerosols over Two Sites in a Southeastern Region of Texas," *The Canadian Journal of Chemical Engineering*, **86**, 241-435, 2008.
84. Lin C.-J., Pan L., Shetty S., Streets D.G., Jang C., Ho T.C., Chu H. "Evaluation of Mercury Outflow from East Asia using CMAQ-Hg," *the 7th CMAS Conference*, Research Triangle Park, NC, October 6-8, 2008.
85. Pan L., Lin C.-J., Shetty S., Streets D.G., Jang C., Ho T.C., Chu H. "Study of Mercury Transport over the Pacific," *the 7th CMAS Conference*, Research Triangle Park, NC, October 6-8, 2008.
86. Ho, T. C. , S. Shetty, H. W. Chu, C. J. Lin, and J. R. Hopper, "Simulation of Mercury Emission Control by Activated Carbon under Confined-bed Operations," *Powder technology*, **180**, 332 (2008).

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.
93. Li Pan, Che-Jen Lin, Gregory R. Carmichael, David G. Streets, Youhua Tang, Jung-Hun Woo, Suraj K. Shetty, Hsing-Wei Chu, Thomas C. Ho, Hans R. Friedli, and Xinbin Feng, "Study of Atmospheric Mercury Budget in East Asia Using STEM-Hg Modeling System," *Science of the Total Environment*, **408** (16), 3277-3291, 2010.
94. Chiou P., Shah J., Lin C.-J., Tadmor R., Chu H., Ho T.C., "Source Identification of Houston Aerosol with Carbon Fractions in Positive Matrix Factorization," *International Journal of Environment and Development*, **7**, 135-152, 2010.
95. Pallavkar S., Kim T.H., Lin J., Hopper J., Ho T., Jo H.J., Lee J.H., "Microwave-Assisted Noncatalytic Destruction of Volatile Organic Compounds Using Ceramic-Based Microwave Absorbing Media," *Industrial & Engineering Chemistry Research*, **49**, 8461-8469, 2010.
96. J. Zhu, S. Wei, M. J. Alexander, D. Cocke, T. C. Ho and Z. Guo, "Electrical Conductivity Manipulation and Switching Phenomena of Poly(p- phenylenebenzobisthiazole) Thin Film by Doping Process," *Journal of Materials Chemistry*, **20**, 568-574 (2010).
97. Zhu, S. Wei*, M. J.. Alexander, T. D. Dang, T. C. Ho and Z. Guo, "Enhanced Electrical Switching and Electrochromic Properties of Poly(p-phenylenebenzobisthiazole) Thin Films Embedded with Nano-WO₃," *Advanced Functional Materials*, **18**, 3076-3084 (2010).
98. Chiou, Paul, Wei Tang, Jalpa Shah, Rafael Tadmor, and T. C. Ho, "Source Identification and Apportionment of Atmospheric Aerosol over Port Arthur of Texas," *International Journal of Environmental Science and Development*, **2**, 363-371 (2011).
99. Zhu, J., H. Gu, S. B. Rapole, Z. Luo, S. Pallavkar, N. Haldolaarachchige, T. J. Benson, T. C. Ho, J. Hopper, D. P. Young, S. Wei* and Z. Guo, "Looped Carbon Capturing and Environmental Remediation: Case Study of Magnetic Polypropylene Nanocomposites," *RSC Advances*, **2**, 4844-4856 (2012).
100. Cai, T. X., Wang, S. J. Xu, Q., Ho, T.C., "Proactive Abnormal Emission Identification via Air-quality Monitoring Network", *Industrial & Engineering Chemistry Research*, **52**, 9189-9202 (2013).

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 Energy-Assisted Pyrolysis vs Conventional Pyrolysis”, *Chemical Communications*, **49**, 258-260 (2013).
104. Qin Qian, Badri Parajuli, Qi Fu, Kaiming Yan, John L. Gossage, and Thomas Ho, “Assessment of Acid Deposition Effects on Water Quality of the Upper Rio Grande River Section in Texas,” *Journal of Water Resource and Protection*, **5**, 792-800 (2013). URL: <http://dx.doi.org/10.4236/jwarp.2013.58080>
105. Wang, Z. Y., Xu, Q.*, Ho, T. C., “Emission Source Characterization during An Ethylene Plant Shutdown”, *Chemical Engineering & Technology*, **37**, 1-12 (2014).
106. Zhu, J., M. Chen, H. Wei, N. Yerra, N. Haldolaarachchige, Z. Luo, D. P. Young, T. C. Ho, S. Wei and Z. Guo, “Magnetocapacitance in Magnetic Microtubular Carbon Nanocomposites under External Magnetic Field,” *Nano Energy*, **6**, 180–192 (2014).
107. Wang, Z. Y., Zhang J., Xu, Q., Ho, T. C. “Dynamic Simulation for Optimal Operation of Distillation Column Startups in an Ethylene Plan”, *Proceedings of the 26th Ethylene Producers' Conference*, New Orleans, Louisiana, USA, March 30 - April 3, 2014.
108. Zhu, J., H. Gu, J. Guo, M. Chen, H. Wei, Z. Luo, H. A. Colorado, N. Yerra, D. Ding, T. C. Ho, N. Haldolaarachchige, H. Hopper, D. P. Young, S. Wei* and Z. Guo*, “Mesoporous Magnetic Carbon Nanocomposite Fabrics towards Highly Efficient Cr(VI) Removal,” *Journal of Materials Chemistry A*, **2**, 2256-2265 (2014).
109. Gu, H., J. Guo, H. Wei, X. Yan, D. Ding, X. Zhang, Q. He, S. Tadakamalla, X. Wang, T. C. Ho, S. Wei and Z. Guo, “Transparent Anhydride-cured Epoxy Nanocomposites Reinforced with Polyaniline Stabilized Nanosilica,” *Journal of Materials Chemistry C*, **3**, 8152 - 8165 (2015).
110. Ding, D., X. Yan, X. Zhang, Q. He, B. Qiu, D. Jiang, H. Wei, J. Guo, A. Umar, L. Sun, Q. Wang, M. A. Khan, D. P. Young, X. Zhang, B. Weeks, T. C. Ho, Z. Guo and S. Wei, “Preparation and Enhanced Properties of Fe₃O₄ Nanoparticles Reinforced Polyimide Nanocomposites,” *Superlattices and Microstructures*, **85**, 305-320 (2015).
111. Qiu, B., Xu, C., Sun, D., Wang, Q., Gu, H., Zhang, X., Weeks, B.L., Hopper, J., Ho, T.C., Guo, Z., Wei, S., “Polyaniline Coating with Various Substrates for Hexavalent Chromium Removal,” *Applied Surface Science*, **334**, 7 - 14 (2015).
112. Ge, S. J., Wang, S. J., Xu, Q., T. C. Ho, “Air-quality Conscious Scheduling for Multiple Ethylene Plant Start-ups”, *Industrial & Engineering Chemistry Research*, **55** (36), 9698-9710 (2016).
113. Wang, Z. Y., Wang S., Xu, Q., Ho, T. C., “Impacts of flare emissions from an ethylene plant shutdown to regional air quality”, *Atmospheric Environment*, **138**, 22-41 (2016).
114. Wang, Z. Y., Xu, Q., Ho, T. C., “Optimal Retrofit Design of Crude Distillation Units for Processing Shale Gas/Natural Gas Condensate Oil”, *Chemical Engineering & Technology*, **39**, 1 - 13 (2016).

- 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).