RESUME

C. P. Huang, Ph.D., P.E.
Donald C. Phillips Professor
Francis Alison Professor
Department of Civil & Environmental Engineering
University of Delaware
Newark, DE 19716

Tel: (302) 831-8428
Fax: (302) 831-3640
E-mail: huang@udel.edu
http://www.ce.udel.edu/directories/profiles.html?huang

EDUCATION

1965	B. S	National Taiwan University (Civil Engineering), Taipei, Taiwan
1967	M. S.	Harvard University (Environmental Engineering), Cambridge, MA, USA
1971	Ph.D.	Harvard University (Environmental Engineering-Aquatic Chemistry), Cambridge, MA, USA

EXPERIENCE

2016-2019	University Chair Professor, National Chiao Tung University
2016-2019	Distinguished Visiting Professor, National Chung Hsing University
2009-2014	Distinguished Chair Professor, National Taiwan University
2006-2016	Chair Professor in Environmental Protection and Restoration, National Chung Hsing University
2002 -	Donald C. Phillips Professor of Civil and Environmental Engineering University of Delaware, Newark, DE, USA
2001 - 2002	Visiting Chair Professor, National Chiao Tung University, Taiwan
1996 - 2001	Chairman, Department of Civil and Environmental Engineering University of Delaware, Newark, DE, USA
1995 - 1995	Visiting Chair Professor, Graduate Institute of Environmental Engineering National Taiwan University, Taipei, Taiwan
1992 -	Distinguished Professor of Environmental Engineering, University of Delaware, Newark, DE, USA
1988-1989	Visiting Professor, Graduate Institute of Environmental Engineering National Taiwan University, Taipei, Taiwan
1981 - 1992	Professor, Department of Civil Engineering, University of Delaware, Newark, DE, USA
1977 - 1981	Associate Professor, Department of Civil Engineering, University of Delaware, Newark, DE, USA
1974 - 1977	Assistant Professor, Department of Civil Engineering, University of Delaware, Newark, DE, USA
1973 - 1973	Guest Lecturer, Department of Civil Engineering, Michigan State University, East Lansing, MI, USA
1971 - 1974	Assistant Professor, Department of Civil Engineering, Wayne State University, Detroit, MI, USA

REGISTRATION

State of Delaware, Professional Engineer No. 4851.

AWARDS AND HONORS

2017	Lifetime Achievement Award, Chinese American Professors of Environmental Engineers and Sciences
2017	Distinguished Lifetime Achievement Award, Chinese Institute of Engineering-USA
2016	Fellow, Chinese Institute of Environmental Engineering
2015	Special issues on “Environmental Nanotechnology and Sustainability in Water Treatment” (Eds. Virender K. Sharma and Ruey-an Doong), honored by the Journal of Separation and Purification Technology, Elsevier Publishing
2014	Symposium on “Thermodynamics and Kinetics of Treatment Processes” honored by the Division of Environmental Chemistry, August 10-14, San Francisco, CA
2014	Distinguished Service Award, Chinese-American Professors in Environmental Engineering and Science (CAPES)

2012	Special Issue on “Advances in Research and Development of Sustainable Environmental Technology” (Eds. Chihpin Huang, Dionysios D. Dionysiou, Maohong Fan) honored by Journal of Environmental Engineering, American Society of Civil Engineers, March 2012 Vol. 138 No. 3
2012	Gordon Maskew Fair Award, American Academy of Environmental Engineers
2011	Top 25 most cited publications, Applied Catalysis, B. Environment
2010	Diplomate, American Academy of Water Resource Engineers
2009	Board Certified Diplomate, American Academy of Environmental Engineers
2009	Francis Alison Award, University of Delaware
2008	Graduate Advising and Mentoring Award, University of Delaware
2008	Wesley H. Horner Award, American Society of Civil Engineers
2005	Best Theoretical Paper Award, World Water and Environmental Resources Congress, American Society of Civil Engineers
1999	Gordon Maskew Fair Medal, Water Environment Federation
1996	Gold Medal Research Award for Life-time Achievements, Chinese Institute of Environmental Engineering
1995	Outstanding International Environmental Services Award, Overseas Chinese Environmental Engineers and Scientists Association
1994	Best Paper Award, Chinese Institute of Environmental Engineering
1994	Outstanding Researcher of the Year Award, Overseas Chinese Environmental Engineers and Scientists Association
1994	Author of “Citation Classics” Stumm, W., C. P. Huang**,** and R. S. Jenkins, “Specific Chemical Interactions Affecting the Stability of Dispersed Systems.” *Croat. Chim. Acta*., 42:223-245, (1970)
1993	Outstanding Environmental Service Award, Overseas Chinese Environmental Engineers & Scientists Association
1990	Excellence in Service Award, Environmental Protection Bureau, Taiwan Provincial Government, Taiwan
1990	Excellence in Service Award, Environmental Engineering Division, American Society of Civil Engineers

RESEARCH GRANTS

1971-1972; Wayne State University, Faculty Research Award, "Phosphate Removal by Alumina Adsorption", $1,000 (PI)

1973-1974; Wayne State University Faculty Research Award, "Methane Production from Organic Wastes", $7,000 (PI)

1974-1975; University of Delaware Research Foundation, "Oil Recovery from Refinery Wastewater", $9,000 (PI)

1975-1978; National Science Foundation, "Chemical Processes in the Limnological Transformation of Dissolved Organic Nitrogen", $64,000 (PI)

1976-1977; National Science Foundation, "Oil Weathering", $24,000 (PI)

1976-1978; National Science Foundation, "Removal of Trace Metals from Municipal Sludge", $5,600 (PI)

1976-1977; US Environmental Protection Agency, "The Development of an Activated Carbon Process for the Treatment and Disposal of Chromium(VI) Plating Industrial Wastewaters", $37,000 (PI)

1978-1980; US Environmental Protection Agency," The Development of an Activated Carbon Process for the Treatment of Cadmium Plating Wastewater", $50,000 (PI)

1978-1981; National Science Foundation, "Chemical Interactions between Heavy Metals and Hydrous Solids. The Effect of Complex Formation", $171,000 (PI)

1980-1982; US Environmental Protection Agency, "The Removal of Heavy Metals by Activated Carbon Process from Water and Wastewater", $165,000 (PI)

1981-1984; National Science Foundation, "The Effect of Complex Formation on the Adsorption Behavior of Heavy Metals on Some Solid Particulates", $104,000 (PI)

1983-1986; US Department of Interior, "Concurrent Removal of Toxic Substances from Groundwater by Activated Carbon Adsorption", $42,000 (PI)

1984-1985; National Science Foundation, "Environmental Heavy Metal Chemistry Instrument Grant", $35,000 (PI)

1984-1987; National Science Foundation, "The Kinetics of Metal Sulfide Oxidation in Heterogeneous Solutions", $250,000 (PI)

1984-1985; University of Delaware Biomedical Research Program, "The Adsorption Characteristics of Heavy Metals onto Hydrous Hydroxyapatite", $7,000 (PI)

1985-1988; Department of Interior, "The Photocatalytic Oxidation of Toxic Organic Substances", $40,500 (PI)

1986-1989; US Geological Survey, "The Removal of Toxic Heavy Metals from Contaminated Groundwater and Specific Industrial Wastewater by Fungal Adsorption Process", $167,791 (PI)

1989-1992; Department of Interior, "In-situ Treatment of Contaminated Groundwater by Electrochemical Oxidation Processes", $50,000 (PI)

1989-1992; US Environmental Protection Agency, "Treatment of Organic Wastes by Photocatalytic Oxidation Processes", $289,723 (PI)

1989-1990; Electric Power Partner, "Use of Power Plant Solid Residues for the Treatment of Metal Wastes", $12,000 (PI)

1989-1991; US Environmental Protection Agency, "Environmental Chemistry of Metal Sulfide", $176,713 (PI)

1990-1993; New Jersey Department of Environmental Protection, "The Fate and Transport of Inorganic Contaminants in New Jersey Soils", $99,625 (Co-PI, PI: Herb Allen)

1990-1993; New Jersey Department of Environmental Protection, "Environmental Fate Investigation of Chromium Contamination", $111,257 (PI)

1990-1991; Delaware Department of Transportation, "Impact of Traffic Development on Wetland Ecosystem", $5,000 (PI)

1991-1992; US Environmental Protection Agency, "Workshop on Heavy Metal Speciation and Soil Contamination", $35,000 (Co-PI; PI: Herb Allen)

1991-1993; Delaware State Research Partnership Program, "The Development of an Electrochemical Processes for In-situ Treatment of Surfactant Contaminated Aquifer", $80,000 (PI)

1991-1993; Du Pont Chemical Company, "The Development of an Electrochemical Processes for In-situ Treatment of Surfactant Contaminated Aquifer", $100,000 (PI).

1991-1992; Du Pont Chemical Company, "Remediation of TEL Contaminated Soils in C-Basin", $40,000 (PI)

1991-1994; Delaware Department of Transportation, "Engineering Design of Wetland Protection Measures due to Highway Construction Operations", $65,000 (PI)

1992-1993; Sara Lee Company, "Feasibility Study on the Treatment of Textile Industrial Wastewater by Fenton's Oxidation Process", $18,000 (PI)

1993-1994; New Jersey Department of Environmental Protection, "Transport of Mercury and Arsenic in New Jersey Soils", $65,000 (Co-PI; PI: Herb Allen)

1994-1997; Water Environment Federation Research Fund, "Rate and Equilibrium of Heavy Metal Uptake by Wastewater Particulates", $250,000 (PI)

1995-1996; Maryland State of Environment, "Recovery of EDTA from Power Plant Washing Wastewater", $75,000 (PI)

1996-1997; Delaware Solid Waste Authority, “Development of Technology and Education Program in Solid Waste Management”, $37,400 (PI)

1996-2000; Department of Energy, “Integrated Electro-kinetic Electro-Fenton (EKEF) Process for In-situ Soil Remediation”, $350,000 (PI)

1998-1999; Bureau of Reclamation, Department of Interior, “Treatment of Wastewaters for Water Reuse by a Catalytic Sonochemical Process”, $75,000 (PI)

1999-2000; Bureau of Reclamation, Department of Interior, “Treatment of Wastewater for Water Reuse by a Catalytic Sonochemical Process. Phase II”, $50,000 (PI)

1999-2000; Delaware Solid Waste Authority, “Development of Technology and Education Program in Solid Waste Management. Phase II”, $67,000 (PI)

2000-2003; New Jersey Department of Environment, “Separation of Naturally Occurring Colloid Particulates from Ground Water by Crossflow Electro-filtration (CFEF) Process for Improving the Analysis of Lead, ” $140,000 (PI)

Tague Regional Industrial Waste Research Center, Korea, “Removal of Total Nitrogen in Agricultural Runoffs”, $30,000 (PI)

2001-2003; Department of Agriculture, US-Egypt Program, “Photocatalytic Process for the Treatment of Metal Containing Wastewater” $25,000 (PI; Co-PI: Mohamed Barak)

2002-2003; National Science Foundation, “Electrically Assisted Tangential Flow Filtration for the Separation of Nano-sized Environmental Particles”, $90,000 (PI)

2002-2005; National Science Foundation, “Chemical Interactions of Selected Pollutant Molecules with Nanostructured Photocatalysts and Sensors”, $1,000,000 (Co-PI; PI: Shah, Ismat)

2002-2003; Tague Regional Industrial Waste Research Center, Korea, “Nano-sized TiO_2 Photocatalyst for the Control of Environmental Chemical Hazards”, $50,000 (PI)

2004-2007 US Environmental Protection Agency, “Short Term Chronical Toxicity of Nanomateials toward Bacteria, Algae and Zooplanktons, $370,000 (PI; Co-PI Dan Cha)

2005-2007 SERDP, “Removal of Perchlorate by Catalytic Hydrogen Membrane, $450,000 (PI; Co-PI: Ismat Shah, Jingguang Chen)

2007-2010 Industrial Technology Research Institute, Taiwan, “Ecotoxicity of Nanomaterials”, $50,000 (PI)

2008 -2009 Federal Highway Administration, “Photoelectrochemical Generation of Hydrogen”, $100,000 (Co-I; PI: Prasard, A.J.)

2010- 2011 National Science Foundation, "The 6th International Conference on Sustainable Water Environment", $40,000 (PI)

2010-2011 US Environmental Protection Agency, "The 6th International Conference on Sustainable Water Environment", $15,000 (PI)

2010-2011 International Center, University of Delaware, "The 6th International Conference on Sustainable Water Environment", $23,000 (PI)

2010-2011 Delaware Institute of Environment, University of Delaware, "The 6th International Conference on Sustainable Water Environment", $20,000 (PI)

2010-2011 College of Engineering, University of Delaware, "The 6th International Conference on Sustainable Water Environment", $25,000 (PI)

2010-1012 Delaware Center of Transportation, "Impacts of Bird Droppings and Deicing Salts on Highway Structures: Monitoring, Diagnosis, Prevention", $25,000 (PI)

2010-2011 DE EPSCoR, "An Electrically-assisted Cross-Flow Filtration (EACF) for Studying the Chemistry of Pharmaceuticals and Personal Care Products (PPCPs) at the Surface of Aquatic Nano-particles", $50,000 (PI)

2010-2013 National Science Foundation, "Integrated Electrodialysis and Electrochemcial Processes for the Removal of Perchlorate from Dilute Aqueous Solutions", $365,000 (PI; Co-PI: Ismat Shah)

2011-2014 Environmental Protection Agency, "Fate, Transport and Behavior of Engineered Nnaoparticles in Municipal Wastewater Treatment Plants", $560,000 (PI; Co-PI Murray Johnston)

2014-2017 Delaware Water Resources Center, "Photoelectrochemical (PEC) Process for the Removal of Contemporary Organic Contaminants from Water", $141,000 (PI; Co-PI Ismat Shah)

2015-2017 KDE, Korea, "Removal of Fluoride from Industrial Wastewater", $85,000 (PI)

2016-2018, Cheong Ho Environmental Development Co., Korea, "High-performance red-mud-based composites for enhancing the removal of phosphorus in engineered wetland systems." $100,000 (PI)

2016-2020 National Science Foundation, "Collaborative Research and Education on Synergized Transformational solar Chemical Looping and Photo-ultrasound Renewable Refinery" $5,999,113 (PI: Jerzy Leszcxynski, Jackson State University; Co-PI: C. P. Huang, University of Delaware; Co-PI: Wei Yin Chen, Mississippi State University; Co-PI: Maohong Fan, Wyoming University)

PUBLICATIONS

A. Books

1981

1. **Industrial Waste** (Ed. C. P. Huang), Ann Arbor Science Publisher, Ann Arbor, MI, 1981.

1994

2. **Industrial and Hazardous Waste** (Ed. C. P. Huang), Technomics Publisher, Lancaster, PA, 1994.
3. **Heavy Metal Speciation and Soil Contamination** (Eds. H. E. Allen, C. P. Huang, G. Baily and A. R. Bowers), Lewis Publisher, Ann Arbor, MI, 1994.
4. **Aquatic Chemistry. Interspecies and Interphase Processes** (Eds. C. P. Huang, C. R. O'Melia and J. J. Morgan), Advances in Chemistry Series No. 244, American Chemical Society, Washington, DC, 1994.

2010

5. **Environmental Nanotechnology** (Eds. Maohong Fan, C. P. Huang, Alan E. Bland, Zhonglin Wang, and Ian Wright), Elsevier Science Publishers, 2010.

2012

6. **Technology for Sustainable Water Environment** (Eds. C. P. Huang and Herschel A. Elliot).Special Issue, Separation and Purification Technology, 84(9), Elsevier Publisher, 2012.

B. Book Chapters

1976

1. Huang, C. P. The Electrical double layer of γ–Al_2O_3 electrolyte interface. In **Colloid & Interface Science,** IV (Ed. Kerker, M. K.), Academic Press, Inc., pp 29-44, 1976.

1978

2. Huang, C. P. Solid-solution interface. It's role in controlling the chemical composition of natural waters. In **Transport Processes in Lakes and Oceans** (Ed. R. Gibbs), Plenum Press, pp 9-33, 1978.
3. Huang, C. P. Chemical interactions between inorganic and activated carbon. In **Carbon Adsorption Handbook** (Eds. P.N. Cheresiminoff and F. Ellerbush), Ann Arbor Science Publisher, pp 281-329, 1978.

1981

4. Huang, C. P. and P. Wirth. Treatability of Cd(II) plating wastewater by aluminosilicates. In **Industrial Waste** (Ed. C.P. Huang), Ann Arbor Science Publisher, pp 87-95, 1981.
5. Huang, C. P., A.R. Bowers, and G. Chin. Predicting the performance of a lime-neutralization/precipitation process for the treatment of some heavy metals-laden industrial wastewaters. In **Industrial Waste** (Ed. C.P. Huang), Ann Arbor Science Publisher, pp 51-62, 1981.
6. Huang, C. P. and E. H. Smith. Removal of cadmium (II) from plating wastewater by activated carbon process. In **Chemistry of Water Reuse** (Ed. W. Cooper), Ann Arbor Science Publisher, pp 355-412, 1981.
7. Huang, C. P. Surface acidity of hydrous solids. In **Adsorption of Inorganic at the Solid Liquid Interface** (Eds. M. Anderson and A. Rubin), Ann Arbor Science Publisher, pp 58-70, 1981.
8. Huang, C. P. and Y. T. Lin. Specific adsorption of Co(II) and Co(III)-EDTA complexes on hydrous surface. In **Adsorption from Aqueous Solution** (Ed. P. Tewari), Plenum Press, pp 61-91, 1981.

1986

9. Huang, C. P., Y.S. Hsieh, S.W. Park, M.O. Corapcioglu, A.R. Bowers, and H.A. Elliott. Chemical interactions between heavy metals and hydrous solids. In **Metal Speciation, Separation and Recovery** (Eds. J.W. Paterson and R. Passino), Ann Arbor Science Publisher, pp 437-465, 1986.

1990

10. Huang, C. P. and J. M. Tseng. Mechanistic aspect of the photocatalytic oxidation of phenol in aqueous solutions. In **Emerging Technologies for Hazardous Wastes** (Ed. W. Tedder), America Chemical Society, pp12-39, 1990.

1991

11. Tien, C. T. and C. P. Huang. Kinetics of heavy metal adsorption on sludge particulate. In **Heavy Metal in the Environment** (Ed. J. P. Vernet), Elsevier Science Publishers, pp313-328, 1991.
12. Tien, C. T. and C. P. Huang. Formation of surface complexes between heavy metals and sludge particulate. In **Heavy Metal in the Environment**, (Ed. J.P. Vernet), Elsevier Science Publishers, pp 295-311, 1991.
13. Huang, J. P., C. P. Huang and A.L. Morehart. Removal of heavy metals by fungal (Aspergillus oryzae) adsorption. In **Heavy Metal in the Environment** (Ed. J.P. Vernet), Elesvier Science Publishers, pp 329-349, 1991.

1994

14. Dong, C. D. and C. P. Huang. Photocatalytic degradation of 4-chlorophenol in TiO_2 aqueous suspensions. In **Advances in Aquatic Chemistry** (Eds. C.P. Huang, C. O'Melia and J.J. Morgan), Advances in Chemistry Series No. 244, pp 291-313, 1994.
15. Takiyama, M. M. K., C. S. Chiu, Y. C. Huang, C.P. Huang and H.S. Huang. The removal of priority pollutants from groundwater by advanced oxidation processes. In **Hazardous and Industrial Waste** (Ed. C. P. Huang), Technomics Publisher, Lancaster, PA, pp. 178-185, 1994.

16. Mioduski, K. A. and C.P. Huang. Oxidation of atrazine and its intermediates by Fenton's reagent. In **Hazardous and Industrial Waste** (Ed. C. P. Huang), Technomics Publisher, Lancaster, PA, pp. 194-204, 1994.
17. Terranova, N. and C.P. Huang. Reduction of THMF potential by Fenton's reagent. In **Hazardous and Industrial Waste** (Ed. C. P. Huang), Technomics Publisher, Lancaster, PA, pp. 205-210, 1994.
18. Tang, W. Z. and C. P. Huang. Oxidation kinetics and mechanisms of 1,4-dichlorpphenol by Fenton's reagent. In Hazardous **and Industrial Waste** (Ed. C. P. Huang), Technomics Publisher, Lancaster, PA, pp. 212-220, 1994.
19. Jardim, W. F., R. M. Albericki, Takiyama M. M. K., and C.P. Huang. Gas phase photocatalytic degradation of trichloroethylene (RTCE) using UV/TiO_2. In Hazardous **and Industrial Waste** (Ed. C. P. Huang), Technomics Publisher, Lancaster, PA, pp. 230-240, 1994.
20. Ehrilich, R. S. and C.P. Huang. Remediation of soil contaminated by 2-chlorophenol and 2,4,6-chloropheno using supercritical fluid extraction. In **Hazardous and Industrial Waste** (Ed. C. P. Huang), Technomics Publisher, Lancaster, PA, pp. 472-479, 1994.
21. Weng, C. H., Takiyama, L. R., and C. P. Huang. Electro-osmosis for the in-situ treatment of chromium-contaminated soil. In **Hazardous and Industrial Waste** (Ed. C. P. Huang), Technomics Publisher, Lancaster, PA, pp. 496-505, 1994.
22. Shin. H. M. and C.P. Huang. The feasibility study of lead removal by soil washing. In **Hazardous and Industrial Waste** (Ed. C. P. Huang), Technomics Publisher, Lancaster, PA, pp. 506-513, 1994.
23. Chen, N., G. M. Fu, and C.P. Huang. Sulfur recovery from caustic sodium sulfide industrial wastewater by electrochemical oxidation and electrodialysis processes. In Hazardous **and Industrial Waste** (Ed. C. P. Huang), Technomics Publisher, Lancaster, PA, pp. 585-594, 1994.
24. Takiyama, L. R., A. Rossi, M. C. Hsu, C.P. Huang and H.S. Huang. Recovery of Fe(II)-EDTA from wet-scrubber liquid by electrochemical methods. In **Hazardous and Industrial Waste** (Ed. C. P. Huang), Technomics Publisher, Lancaster, PA, pp. 611-618, 1994.

2000

25. Qiang, Z. M. J. H. Chang, D. Cha, and C. P. Huang. Oxidation of selected polycyclic aromatic hydrocarbons by the Fenton's regent: Effect of major factors including organic solvent. In **Nuclear Site Remediation Technologies**. ACS Symposium Series No. 778. (Eds. William R. Heineman and P. Gary Eller). American Chemical Society, pp 187-210, 2000.
26. Chang, J. H., Z. H. Qiang, D. Cha, and C.P. Huang. Electro-osmosis flow rate: A semi-empirical approach. In **Nuclear Site Remediation Technologies**. ACS Symposium Series No. 778. (Eds. William R. Heineman and P. Gary Eller). American Chemical Society, pp 247-266, 2000.

2001

27. Pamukcu, Sibel and C.P. Huang. In-situ remediation of contaminated soils by electrokinetic process. In **Handbook of Mixed Waste Management Technologies** (Ed. Chang Oh). CRC Press, pp 3.1-3 -3.1-39, 2001.

2007

28. Huang, C. P., J. A. Yun, and S. W. Park, Removal of nitrate from water by a combination of metallic iron reduction and clinoptilolite ion exchange process. In **Zero-valent Iron Reactive Materials for Hazardous Waste and Inorganics Removal**. ASCE (Ed. Irene Lo), pp 167-197, 2007.

2008

29. Ayca, E., D. Cha, Tseng, Y. H. and C. P. Huang. Growth and some enzymatic eesponses of *E. coli* to phtocatalytic TiO_2. Chapter 13. In **Applications and Implications of Nanotechnology** (Ed. V. Grassian), pp 319-344, 2008.

2009

30. Minghua Li, Hong Ying Lin, and Chin Pao Huang. Nanotechnostructured catalysts TiO_2 nnaoparticles for water purification**.** Chapter 3 in **Nanotechnologies for Water Environment Applications, ASCE** (Eds. Tian C. Zhang; Rao Y. Surampalli; Keith C. K. Lai; Zhiqiang Hu; R. D. Tyagi; Irene M. C. Lo), pp43-92, 2009.

2010

31. Huang, C. P., Hsun-Wen Chou, Yao-hsing Tseng, and Maohong Fan. Responses of *Ceriodaphnia dubia* to photocatalytic nano-TiO_2 particles. Chapter 1 in **Environmental Nanotechnologies,** Elsevier Science Publishers Publisher (Eds. Maohong Fan, C. P. Huang, Alan E. Bland, Zhonglin Wang, and Ian Wright), pp 1-

21, 2010.

C. Refereed Articles

1970

1. W. Stumm, C. P., Huang, and R. S. Jenkins (1970). Specific chemical interactions affecting the stability of dispersed systems. **Croat. Chim. Acta**., 42:223-245 (1993 Classics of Citation). (545)

1972

2. Huang, C. P. and W. Stumm (1972). The specific surface area of γ-Al_2O_3. **Surface Science**, 32(2): 287-296.

1973

3. Huang, C. P. and W. Stumm (1973). Specific adsorption of cations onto hydrous γ-Al_2O_3 surface. **J. Colloid & Interface Science**, 43(2): 409-420. (651)

1974

4. Huang, C.P. and M. Ghadrian (1974). Physical chemical treatment of paint industrial wastewater. **J. Water Pollution Control Federation**, 46(10): 2340-2346.

1975

5. Huang, C. P. and W. Stumm (1975). The removal of aqueous silica from dilute aqueous solution. **Earth & Planetary Science Letters**, 27(2): 265-274.
6. Huang, C.P. and M. H. Wu (1975). Chromium removal by activated carbon. **J. Water Pollution Control Federation**, 47(10): 2437-2446.
7. Huang, C. P. (1975). Adsorption of tryptophan onto calcium carbonate surface. **Environmental Letters**, 9(1): 7-17. (3)
8. Huang, C. P. (1975). Adsorption of phosphate at the γ-Al_2O_3 electrolyte interface. **J. Colloid & Surface Science**, 53(2): 178-186.
9. Huang, C. P. (1975). Ion-pair formation in calcium carbonate equilibria. **Environmental Letters**, 10(4): 319-334.

1976

10. Huang, C. P. (1976). Discussion of the use of crushed limestone to neutralize acid waste. **J. Environmental Engineering**, ASCE, 102(1):223-227.
11. Stumm W and Huang, C.P. (1976). Spezifische adsorption von kationen an wasserhaltiges γ-Al_2O_3. **Colloid & Polymer Science**, 254 (8):746-446.

1977

12. Huang, C. P. (1977). Removal of heavy metals from industrial effluent. **J. Environmental Engineering,** ASCE, 103(3):520-522.
13. Huang, C. P. (1977). Removal of phosphate by powdered aluminum oxide adsorption. **J. Water Pollution Control Federation** 49 (8): 1811-1817.
14. Huang, C. P., H.A. Elliott and R.M. Ashmead (1977). Interfacial reactions and the fate of trace metals in soil-water systems. **J. Water Pollution Control Federation**, 49(5): 745-756.
15. Huang, C.P. and M. H. Wu (1977). The removal of chromium (VI) from dilute aqueous solution by activated carbon. **Water Research,** 11(8):673-679. (307)
16. Huang, C. P., Elliott, H. A., and Ashmead, R. M., Regeneration of activated carbon for the adsorption of chromium. J. Water Pollution Control Federation, 745-756.

1978

17. Huang, C. P and F. B. Ostovic (1978). Removal of cadmium (II) by activated carbon adsorption. **J. Environmental Engineering,** ASCE, 104(5): 863-878. (118)
18. Huang, C. P. and A. R. Bowers (1978). Use of activated carbon for chromium(VI) removal. **Progress in Water Technology**, 10(5): 45-64.

1979

19. Elliott, H. A. and C. P. Huang (1979). The adsorption characteristics of Cu(II) in the presence of chelating agents. **J. Colloid & Interface Science**, 70(1): 29-45.

20. Elliott, H. A. and C. P. Huang (1979). The effect of complex formation on the adsorption characteristics of heavy metals onto solid surface. **Environmental International**, 2(3): 145-155.

1980

21. Elliott, H. A. and C. P. Huang (1980). The adsorption of some Cu(II)-amino complexes at the solid-solution interface. **Environmental Science & Technology**, 14(1): 87-93.
22. Bowers, A. R., and Huang, C. P., Activated carbon processes for the treatment of chromium(VI)-containing industrial wastewaters. Water Science & Technology, 13(1):629-649.

1981

23. Elliott, H. A. and C. P. Huang. The adsorption of Cu(II) complexes onto aluminosilicates. **Water Research**, 15(7): 849-855 (1981). (269)

1982

24. Huang, C. P. and P. K. Wirth (1982). Activated carbon for the treatment of cadmium (II) wastewater. **J. Environmental Engineering**, ASCE, 108(6):1280-1299.
25. Kao, J. F., L. P. Hsieh, S. S. Cheng and C. P. Huang (1982). Effect of EDTA on cadmium in activated sludge systems. **J. Water Pollution Control Federation**, 54(7): 1118-1126.

1983

26. Huang, C. P. and G. C. Quist (1983). The dissolution of a manganese ore in dilute aqueous solution. **Environmental International**, 9(5): 379-389.

1984

27. Huang, C. P. and D.W. Blankenship (1984). The removal of mercury (II) from dilute aqueous solution by activated carbon. **Water Research**, 18(1): 37-46. (236)
28. Huang, C. P. and L. K. Fu (1984). Treatment of arsenic (V)-containing water by activated carbon. **J. Water Pollution Control Federation,** 56(3): 233-242.

1985

29. Elliott, H. A. and C. P. Huang (1985). Factors affecting the adsorption of complexed heavy metals on hydrous γ-Al_2O_3. **Water Science Technology**, 17(6/7): 1017-1028.
30. Ferrell, D. P. and C.P. Huang (1985). The removal of fine coal particles from water by flotation. **Chemical Engineering Communication**, 35(1/6): 351-372.
31. Bowers, A. R. and C.P. Huang (1985). Adsorption characteristics of polyacetic amino acids onto hydrous γ-Al_2O_3. **J. Colloid & Interface Science**, 105(1): 197-215.
32. Huang, C. P., Y. S. Hsieh, and W. H. Tseng (1985). Removal of Co(II) from water by activated carbon. **AICHE, Symposium Series** 243 (81): 85-99.

1986

33. Elliott, H. A., M. R. Liberati and C.P. Huang (1986). Effect of iron oxide removal on heavy metal sorption by subsoils. **J. Air, Water & Soil Pollution**, 27(3/4): 379-389.
34. Bowers, A. R. and C. P. Huang (1986). Adsorption characteristics of metal-EDTA complexes onto hydrous Oxides. **J. Colloid & Interface Science**, 110(2): 575-590.
35. Elliott, H. A., M. R. Liberati and C.P. Huang (1986). Competitive adsorption of heavy metals by soils. **J. Environmental Quality,** 15(3), 214-219. (600)
36. Hao, O. J. and C. P. Huang (1986). Adsorption characteristics of fluoride onto hydrous alumina. **J. Environmental Engineering**, ASCE, 112(6): 1054-1069.

1987

37. Corapcioglu, M. O. and C.P. Huang (1987). The surface acidity and characterization of some commercial activated carbons. **Carbon**, 25(4): 569-578. (216)
38. Corapcioglu, M. O. and C. P. Huang (1987). The adsorption of heavy metals onto hydrous activated carbon. **Water Research**, 21(9): 1031-1044. (469)
39. Tien, C. T. and C. P. Huang (1987). Adsorption behavior of Cu(II) onto sludge particulate. **J. Environmental Engineering**, ASCE, 113(2):285-299.

40. Hao, O.J., C. P. Huang, and C.M. Tsai (1987). The removal of heavy metals and ammonia by glauconite. **Environment International**, 13(2): 203-212.
41. Bowers, A. R. and C. P. Huang (1987). Role of Fe(III) in metal complex adsorption by hydrous solids. **Water Research**, 21(7): 757-764.
42. Park, S. W. and C. P. Huang (1987). The surface acidity of hydrous CdS(s). **J. Colloid & Interface Science**, 117(2): 431-441.
43. Huang, C. P., Kehrer, K. P. and O. J. Hao. Huang (1987). Enhanced and inhibitory effects of mineral particulate on utilization of glycine by pseudomonas Species. **Environment International**, 13(6): 497-503.

1988

44. Huang, C. P. D. Westman, K. Quirk, and C. P. Huang (1988). The removal of cadmium(II) from diluted aqueous solutions by fungal adsorbent. **Water Science & Technology**, 20(11/12): 369-376.
45. Huang, C. P. D. Westman, K. Quirk, C. P. Huang, and A.L. Morehart (1988). Removal of cadmium(II) from dilute aqueous solutions by fungal biomass. **Particulate Science and Technology**, 6(3): 405-415.
46. Huang, C. P. E.A. Rhoads and O. J. Hao (1988). Adsorption of Zn(II) onto hydrous aluminosilicates in the presence of EDTA. **Water Research**, 22(8): 1001-1009.

1989

47. Davis, A. P. and C. P. Huang (1989). Removal of Phenols from water by a photocatalytic Oxidation Process. **Water Science &Technology**, 21(6/7): 455-464.
48. Huang, C. P. and E. A. Rhoads (1989). The adsorption of Zn(II) onto hydrous aluminosilicates. **J. Colloid & Interface Science**, 131(3): 289-306.
49. Huang, C. P. and L. M. Vane (1989). Enhancing As(V) removal by Fe(II)-treated activated carbon. **J. Water Pollution Control Federation**, 61(9): 1596-1603.
50. Park, S. W. and C. P. Huang (1989). The adsorption characteristics of some heavy metal ions onto hydrous CdS(s) surface. **J. Colloid & Interface Science**, 128(1): 245-257.
51. Park, S. W. and C. P. Huang (1989). Chemical substitution reaction between Cu(II) and Hg(II) and hydrous CdS(s). **Water Research**, 23(12): 1527-1534.
52. Hao, O. J. and C. P. Huang (1989). Removal of some heavy metals by mordenite. **Environmental Technology Letter**, 10(10): 863-874.
53. Hsieh, Y. H. and C.P. Huang (1989). The dissolution of PbS(s) in dilute aqueous solutions. **J. Colloid & Interface Science,** 131(2): 537-549.

1990

54. Huang, C. P. C. P. Huang, and A. L. Morehart (1990). The removal of Cu(II) from dilute aqueous solutions by *Saccharomyces servisae*. **Water Research**, 24(4): 433-439. (366)
55. Davis, A. P. and C. P. Huang (1990). The removal of substituted phenols by a photocatalytic oxidation process with cadmium sulfide. **Water Research**, 24(5): 543-550.
56. Schulthess, C. P. and C. P. Huang (1990). Adsorption of heavy metals by silicon and aluminum oxide surface on clay minerals. **Soil Science Society of America J.,** 54(3): 679-688.
57. Davis, A. P. and C. P. Huang (1990). Adsorption of some substituted phenols onto hydrous CdS(s) surface. **Langmiur**, 6(4): 857-862.
58. Tseng, J. M. and C. P. Huang (1990). Mechanistic aspects of the photocatalytic oxidation of phenol in aqueous solutions. **ACS Symposium Series,** 422: 12-29.

1991

59. Tseng, J. M. and C. P. Huang (1991). Removal of chlorophenols from water by photocatalytic oxidation. **Water Science & Technology**, 23(1/3): 377-387.
60. Davis, A. P. and C. P. Huang (1991). Anodic dissolution of lead sulfide single crystal in simple electrolyte solution. **Langmuir**, 7(4): 803-808.
61. Hsieh, Y. S., S. Tokunaga, and C. P. Huang (1991). Some chemical reactions at the HgS(s)-water interface as affected by photoirradiation. **Colloids & Surfaces**, 53(3/4): 257-274.
62. Hsieh, Y. S. and C. P. Huang (1991). Photooxidative dissolution of CdS(s). I. Important factors and mechanistic aspects. **Colloids & Surfaces**, 53(3/4): 275-295.
63. Schulthess, C. P. and C. P. Huang (1991). Humic and fulvic acid adsorption by silicon and aluminum oxide surface on clay minerals. **Soil Science Society of America J**., 55(1):34-42.

64. Schulthess, C. P. and C. P. Huang (1991). Adsorption of heavy metals by silicon and aluminum dioxides on clay-minerals. Reply **Soil Science Society of America**, 55(5): 1509-1510.
65. Davis, A. P. and C.P. Huang (1991). Effect of cadmium sulfide characteristics on the photo-catalytic oxidation of thioacetamide. **Langmuir**, 7(4): 709-713.
66. Huang, C. P., C. P. Huang and A. L. Morehart (1991). Proton competition of Cu(II) adsorption onto fungal mycelia. **Water Research**, 25(11): 1365-1375.
67. Davis, A. P. and C. P. Huang (1991). The Photocatalytic oxidation of sulfur-containing organic compounds using cadmium sulfide and the effect on CdS corrosion. **Water Research**, 25(10): 1273-1278.

1992

68. Lee, J., B. Chen, H. E. Allen, C P. Huang, P. Sanders (1992). Trace-metal soil quality criteria to protect groundwater. **Water Science Technology**, 26(9-11): 2327-2329.
69. Hsieh, Y. H., A. P. Davis, and C. P. Huang (1992). Photo-oxidative dissolution of CdS(s) in the presence of heavy metal ions. **Chemosphere**, 24(3): 281-290.
70. Blais, J. F., R. D. Tyagi, J. C. Auclair, and C. P. Huang (1992). Comparison of acid and microbial leaching for metal removal from municipal sludge. **Water Science Technology**, 26(1/2): 197-206.(51)
71. Liu, J. C. and C. P. Huang (1992). Adsorption of some substituted phenols onto hydrous ZnS(s). J**. Colloid & Interface Science**, 153(1): 167-176.
72. Liu, J. C. and C. P. Huang (1992). Electronic characteristics of some metal sulfide-water interfaces. **Langmuir,** 8(7): 1851-1856.

1993

73. Davis, A. P. and C.P. Huang (1993). A kinetics model describing photocatalytic oxidation using illuminated semiconductor. **Chemosphere**, 26(6): 1119-1135.
74. Huang, C. P., C. Dong, and W. Z. Tang (1993). Advanced chemical oxidation: Its present role and potential future in hazardous waste treatment. **Waste Management**, 13(5/7): 361-377. (705)
75. Erhlich, R. and C. P. Huang (1993). Adsorption of chlorophenol onto soil and kaolinite: Effect of the properties of adsorbent and adsorbate. **J. Environmental Engineering and Management**, 3(3): 143-152. **(Best Paper Award)**
76. Hsieh, Y. S., C. P. Hang and A. P. Davis (1993). Photo-oxidative dissolution of CdS(s): The effect of Pb(II) ions. **Chemosphere**, 27(5): 721-732.
77. Lu, M.C., G. D. Roam, J. N. Chen, and C. P. Huang (1993). Microtox bioassay of photodegradation products from photocatalytic oxidation of pesticides. **Chemosphere**, 27(9): 1637-1647.
78. Lu, M.C., G. D. Roam, J. N. Chen, and C. P. Huang(1993) . Factors affecting the photocatalytic degradation of dichlorovos over titanium dioxide supported on glass. **J. Photochemistry Photobiology A. Chemistry**, 76(1/2): 103-110.
79. Davis, A. P., Y. H. Hsieh, and C. P. Huang (1994) . Photo-oxidative dissolution of CdS(s): The effect of Pb(II) ions. Chemosphere, 27(5): 721-732.

1994

80. Davis, A. P., Y. H. Hsieh, and C. P. Huang (1994). Photo-oxidative dissolution of CdS(s): The effect of Cu(II) ions. **Chemosphere**, 28(4): 663-674.
81. Liu, J. C. and C. P. Huang (1994). Adsorption of phenols onto hydrous ZnS(s). Effect of cosolvent and temperature. **J. Hazardous Material**, 38(3): 423-438.
82. Weng, C.H. Weng, C. Huang, H. E. Allen, and P. F. Sanders (1994). Chromium Leaching Behavior in Soil Derived from Chromite Ore Processing Waste. **The Science of Total Environment**, 154(1): 71-86.
83. Weng, C. H. and C. P. Huang (1994). Treatment of metal industrial wastewaters by fly ash and cement fixation. **J. Environmental Engineering**, ASCE, 120(6):1470-1487.
84. Lu, M.C., G. D. Roam, J. N. Chen, and C. P. Huang (1994). Photocatalytic oxidation of dichlorvos in the presence of hydrogen peroxide and ferrous ion. **Water Science & Technology**, 30(9): 29-38.

1995

85. Tang, W. Z. and C. P. Huang (1995). Photocatalyzed oxidation pathways of 2,4-dichlorophenol by CdS in basic and acidic aqueous solutions. **Water Research**, 29(2): 745-756.
86. Lu, M.C., G. D. Roam, J. N. Chen, and C. P. Huang (1995). Photocatalytic mineralization of toxic chemicals with illuminated TiO_2. **Chemical Engineering Communication**, 139(1): 1-13 (1995).

87. Allen, H.E., Y.T. Chen, C. P. Huang, and P. F. Sanders (1995). Soil partition coefficient for Cd(II) by column deposition and comparison to batch adsorption measurements. **Environmental Science & Technology**, 29(8): 1877-1891.
88. Davis, A. P., Y. H. Hsieh, and C. P. Huang (1995). Photodissolution of CdS(s): The effect of complexing agents. **Chemosphere**, 31(4):3093-3140.
89. Tang, W. Z. and C. P. Huang (1995). Inhibitory effect of thioacetamide on CdS dissolution during photocatalytic oxidation of 2,4-dichlorophenol. **Chemosphere**, 30(7): 1385-1399.
90. Tang, W. Z. and C. P. Huang (1995). The effect of chlorine position of chlorinated phenols on their oxidation kinetics by Fenton's reagent. **Waste Management**, 15(8): 615-622.

1996

91. Weng, C. H. C. P. Huang, H. E. Allen, P. B. Leavens, and P. F. Sanders (1996). Chemical interactions between Cr(VI) and hydrous concrete particles. **Environmental Science & Technology**, 30(2): 371-376.
92. Yin, Y.J. H. E. Allen, C. P. Huang, Y. M. Li, and P. F. Sanders (1996). Adsorption of mercury(II) by soil: Effect of pH, chloride, and organic matter. **J. Environmental Quality**, 25(4): 837-844. (276)
93. Huang, C. P. and C. P. Huang (1996). Application of *Aspergillus oryzae* and *Rhizopus oryzae* for Cu(II) removal. **Water Research**, 30 (9):1985-1990. (214)
94. Lee, S. Z., H. E. Allen, C. P. Huang, D. L. Sparks, P. F. Sanders, and W. J. G. M. Peijnenburg (1996). Predicting soil-water partition coefficients for cadmium. **Environmental Science & Technology**, 30(12): 3418-322.(210)
95. Tang, W. Z. and C. P. Huang (1996). 2,4-Dichlorophenol oxidation by Fenton's reagent. **Environmental Technology**, 17(12): 1373-1378. (356)
96. Tang, W. Z. and C. P. Huang (1996). An oxidation kinetic model of unsaturated aliphatic compounds by Fenton's reagent. **J. Environmental Science & Health**, A31(10):2755-2775.
97. Tang. W. Z. and C. P. Huang (1996). Effect of chlorine content of chlorinated phenols on their oxidation kinetics by Fenton's reagent. **Chemosphere**, 33(8): 1621-1635.
98. Lu, M.C., G. D. Roam, J. N. Chen, and C. P. Huang (1996). Adsorption characteristics of dichlorvos onto hydrous titanium dioxide surface. **Water Research**, 30(7): 1670-1676.
99. Weng, C. H. and C. P. Huang (1996). Treatment of metal industrial wastewaters by fly ash and cement fixation. Closure. **J. Environmental Engineering**, ASCE, 122(3):243-2444.

1997

100. Yin, Y. J., H. E. Allen, C. P. Huang, and P. F. Sanders (1997). Effect of pH, chloride, and calcium(II) on adsorption of monomethylmercury by soils. **Environmental Toxicology Chemistry**, 16(12): 2457-2462.
101. Weng, C. H., J. H. Wang, and C. P. Huang (1997). Adsorption of Cr(VI) onto TiO_2 from dilute aqueous solutions. **Water Science & Technology**, 35(7): 55-62.
102. Yin, Y.J., H. E. Allen, C. P. Huang, and P. F. Sanders (1997). Adsorption/desorption isotherms of Hg(II) by soil. **Soil Science**, 162(1): 35-45.
104. Yin, Y. J., H. E. Allen, C. P. Huang, D. L. Sparks, and P.F. Sanders (1997). Kinetics of mercury(II) adsorption and desorption by soils. Environmental Science and Technology, 31(2): 496-503. (235)
105. Yin, Y.J. H. E. Allen, C. P. Huang, and P. F. Sanders (1997). Interaction of Hg(II) with soil-derived humic substances. **Analytica Chimica Acta**, 341(1): 73-82.
106. Tang, W. Z. and C. P. Huang (1997). Stochiometry of Fenton's reagent in the oxidation of chlorinated aliphatic organic pollutants. **Environmental Technology**, 18(1): 13-23.

1998

107. Huang, C. P., H. W. Wang, and P. C. Chiu (1998). Nitrate reduction by metal iron. **Water Research**, 32(8): 2257-2264. (601)
108. Wang, J. M., C. P. Huang, H. E. Allen, L. R. Takiyama, I. Poesponegoro, H. Poesponegoro and D. Pirestani (1998). Acid characteristics of dissolved organic matter (DOM) in wastewater. **Water Environment Research**, 70(5): 1041-1048.
109. Wang, J.M., C. P. Huang, H. E. Allen, D. W. Kim, and D. K. Cha (1998). Adsorption characteristics of dye onto sludge particulates. **J. Colloid & Interface Science**, 208(2): 518-528.

1999

110. Wang, J. M., C. P. Huang, and H. E. Allen, I. Poesponegoro, H. Poesponegoro, and L. R. Takiyama (1999). Effects of dissolved organic matter (DOM) and pH on heavy metal uptake by sludge particulates Exemplified by Cu(II) and Ni(II): Three-variable model**. Water Environment Research**, 71(2): 139-147.
111. Chiang, H. L**.** C. P. Huang, P. C. Chiang, and E. E. Chang (1999). Effect of metal additives on the physico-chemical characteristics of activated carbon exemplified by benzene and acetic acid adsorption. **Carbon**, 37:1919-1928.

2000

112. Wang, J. M., C. P. Huang, and H. E. Allen (2000). Surface physical-chemical characteristics of sludge particulates. **Water Environment Research**, 72(5): 545-553.
113. Huang, C. P. M. Hsu, and J. Miller (2000). Recovery of EDTA from power plant boiler chemical cleaning wastewater. **J. Environmental Engineering**, ASCE. 126(10): 919-924.

2001

114. Kim, I. L., P. C. Chiu, and C. P. Huang (2001). Sonochemical decomposition of dibenzothiophene in aqueous solutions. **Water Research**, 35(18): 4370-4378.
115. Myoda, S. P. and C. P. Huang (2001). A microscopic system with a dual-band filter for the simultaneous enumeration of *Cryptosporidium parvum* oocysts and sporozoites. **Water Research**, 35(17): 4231-4236.
116. Weng, C. H. and C. P. Huang (2001). Cr(VI) Adsorption onto hydrous concrete particles from groundwater. **J. Environmental Engineering**, ASCE, 127(12): 1124-1131.
117. Chiang, H. L., P. C. Chiang, and C. P. Huang (2001). Effect of pore structure and temperature on VOC adsorption on activated carbon. **Carbon**, 39(4): 523-534.(355)
118. Weng, C. H., C. P. Huang, and P. F. Sanders (2001). Effect of pH on Cr(VI) leaching from soil enriched in chromite ore processing residue. **Environmental Geochemistry and Health**, 23(3): 207-211.
119. Khan, Eakalak, C. P. Huang, C.P., and Brian, E. Reed (2001). Hazardous waste treatment technologies. **Water Environment Research**, 63: 1130-1192.
120. Huang, C.P. Huang and J.M. Wang (2011). Factors affecting the distribution of heavy metals in wastewater treatment processes: role of sludge particulate. Water Science & Technology 44(10):47-52.
121. Zhang, H. and Hucnag, C. P. (2000). Treatment of sanitary leachates using Fenton process. Chinese Water Supply, 17(3):1-3.
122. Chang, J. H., Qiang, Z. H., and Huang, C.P. (2001). Oxidation of selected polycyclic aromatic hydrocarbons by the Fenton's reagent: Effet of major factors including organic solvent. ACS Symposoum Series 778, 247-266.

2002

123. Qiang, Z. M., J. H. Chang, and C. P. Huang (2002). Electrochemical generation of hydrogen peroxide from dissolved oxygen in acidic solutions. **Water Research,** 36(1): 85-94. (409)
124. Weng, C. H., C. P. Huang, and P. F. Sanders (2002). Transport of Cr(VI) in Soils Contaminated with Chromite Ore Processing Residue (COPR). **Practice Periodical of Hazardous, Toxic, and Radioactive Waste Management**, ASCE 6:6-13.
125. Shah, S.I., W. Li, C. P. Huang, O. Jung, and C. C. Ni (2002). Study of Nd^{3+}, Pd^{2+}, Pt^{4+}, and Fe^{3+} dopant effect on photoreactivity of TiO_2 nanoparticle. **Proceedings, National Academy of Sciences**, USA 99(10): 7184-7184. (245)
126. Chiang, H. L., P. C. Chiang, and C. P. Huang (2002). The surface characteristics of activated carbon as affected by ozone and alkaline treatment. **Chemosphere**, 47(3): 257-265.
127. Chiang, H. L., P. C. Chiang, and C. P. Huang (2002). Ozonation of activated carbon and its effects on the adsorption of VOCs exemplified by methylethylketone and benzene. **Chemosphere**, 47(3): 267-275.
128. Chiang, H. L., C.P. Huang and P. C. Chiang (2002). The adsorption of benzene and methylethylketone onto activated carbon: Thermodynamic aspect. **Chemosphere,** 46(1): 143-152.
129. Fan, M. H., R. C. Brown, and C.P. Huang (2002). Preliminary studies of the oxidation of arsenic(III) bypotassium ferrate. **International J. Environment and Pollution,** 18(1):91-96.
130. Perry, J. R., P. Chiu,C. P. Huang, and D. Cha (2002). Zero-valent iron pre-treatment for enhancing the biodegradability of azo dyes. **Water Environment Research,** 74(3): 221-225.
131. Zhang, H. and C. P. Huang (2002). Treatment of landfill leachate by Fenton oxidation process. **Chinese J. Chemical Engineering,** 10(1): 128-131.
132. Kim, D. W., D. K., Cha, J. M. Wang, and C. P. Huang (2002). Heavy metal removal by activated sludge: influence of *Nocardia amarae*. **Chemosphere,** 46(1): 137-142. Sung, M. H. and C. P. Huang (2002). In situ removal of 2-chlorophenol from unsaturated soils by ozonation. **Environmental Science & Technology**, 36: (13) 2911-2918.

133. Li, W., S. I. Shah, M. H. Sung, and C. P. Huang (2002). Structure and size distribution of TiO_2 nanoparticles deposited on stainless steel mesh. **J. Vacuum Science & Technology**, 20 (6): 2303-2308.
134. Li, W. S.I. Shah, C.P. Huang, O. Jung, and C. Ni (2002). Metallogranic chemical vapor deposition and characterization of TiO_2 nanoparicles. **Materials Science & Engineering B-Solid State Materials for Advanced Technologies**, 96(3): 247-253.
135. Khan, Eakalak, Huang, C.P., and Brian E. Reed (2002). Hazardous waste treatment technologies. **Water Environment Research**, 87: 903-989.

2003

136. Kim, I. K, S. J. Yoa, J. K. Lee, and C. P. Huang (2003). Reaction pathways and kinetic modeling for sonochemical decomposition of benzothiophene. **Korean J. Chemical Engineering,** 20 (6): 1045-1053.
137. Wang, J. M., C. P. Huang, and H. E. Allen (2003). Modeling heavy metal uptake by sludge particulates in the presence of dissolved organic matter**. Water Research**, 37 (20): 4835-4842.
138. Fan, M. H., R. C. Brown, S. W. Sung, C. P. Huang, S. K. Ong, and J. van Leeuwen (2003). Comparisons of polymeric and conventional coagulants in arsenic(V) removal. **Water Environment Research**, 75 (4): 308-313.
139. Zhang, H., M. H. Sung, C. P. Huang (2003). Mathematical model of in-situ ozonation for the remediation of 2-chlorophenol contaminated soils. **Chinese J. Chemical Engineering**, 11 (5): 555-558.
140. Li, W, Y. Wang, H. Lin, S. I. Shah, C. P. Huang, D. J. Doren, S. A. Rykov, J. G. Chen, and M. A. Barteau (2003). Band gap tailoring of Nd^{3+}-doped TiO_2 nanoparticles. **Applied Physics Letters**, 83 (20): 4143-4145.
141. Wang, J. M., C. P. Huang, and D. Pirestani (2003). Interactions of silver with wastewater constituents. **Water Research**, 37 (18): 4444-4452. (16)
142. Huang, C. P. and S. P. Myoda (2003). Comments on research note - Authors' reply. **Water Research**, 37 (10): 2528-2530.
143. Qiang, Z. M., J. H. Chang, and C. P. Huang (2003). Electrochemical regeneration of Fe^{2+} in Fenton oxidation processes, **Water Research**, 37 (6): 1308-1319. (257)
144. Chuang C. L. P. C. Chiang, E.E. Chang and C.P. Huang (2003). Adsorption–desorption rate of nonpolar volatile organic compounds onto activated carbon exemplified by C_6H_6 and CCl_4. **Practice Periodical of Hazardous, Toxic, and Radioactive Waste Management**, 7(3):148-156 (**Best Theoretical Paper Award**).
145. Khan, Eakalak, Huang, C.P., and Brian E. Reed (2003). Hazardous waste treatment technologies, **Water Environment Research,** 124:1106-1229.

2004

146. Weng, C. H., and C. P. Huang (2004). Adsorption characteristics of Zn(II) from dilute aqueous solution by fly ash. **Colloid & Surfaces A- Physicochemical & Engineering Aspects** 247 (1-3): 137-143.
147. Weng, C.H. and C. P. Huang (2004). Preliminary study on treatment of soil enriched in chromite ore processing residue by electrokinetics. **Practice Periodical of Hazardous, Toxic, and Radioactive Waste Management,** 8 (2):67-72.
148. Li, W., C. C. Ni, H., Lin. C. P. Huang, and S. I. Shah (2004). Size dependence of thermal stability of TiO_2 nanoparticles. **J. Applied Physics**, 96 (11): 6663-6668. (282)
149. Barakat M. A., Y. T. Chen, and C. P. Huang (2004). Removal of toxic cyanide and Cu(II) ions from water by illuminated TiO_2 catalyst. **Applied Catalysis B- Environmental**, 53 (1): 13-20.
150. Khan, E., C. P. Huang, and Brian, E. Reed (2004). Hazardous waste treatment technologies, **Water Environment Research**, 76 (6): 1872-1966.

2005

151. Barakat, M. A., J. M., Tseng, and C. P. Huang (2005). Hydrogen peroxide-assisted photocatalytic oxidation of phenolic compounds. **Applied Catalysis B- Environmental** 59 (1-2): 99-104.
152. Chuang, C. L., M. Fan, M., Xu, R. C. Brown, S. Sung, B. Saha, and C. P. Huang (2005). Adsorption of arsenic(V) by activated carbon prepared from oat hulls. **Chemosphere** 61 (4): 478-483.
153. Zhang, H., H. J. Choi, and C. P. Huang (2005). Optimization of Fenton process for the treatment of landfill leachate. **J. Hazardous Materials**, 125 (1-3): 166-174. (430)
154. Weng, Y. H., L. H. Chaung-Hsieh, H. H. Lee, K. C. Li, and C. P. Huang (2005). Removal of arsenic and humic substances (HSs) by electro-ultrafiltration (EUF). **J. Hazardous Materials**, 122 (1-2): 171-176.
155. Kim, I. K. and C. P. Huang (2005). Sonochemical degradationof polyaromatic sulfur hydrocarbons (PASHs) in aqueous solutions exemplified by benzothiophene. **J. Chinese Institute of Engineering**, 28(7): 1107-1118.

156. Zhang, H., H. J. Choi, and C. P. Huang (2005). Landfill leachate treatment by Fenton's reagent. The variation of leachate characteristics. **Fresenius Environmental Bulletin**, 14 (12B): 1178-1183 Sp. Iss.
157. Khan, E., C. P. Huang, and Brian E. Reed (2005). Hazardous waste treatment technologies. **Water Environment Research**,76 (6): 1872-1966.

2006

158. Wang, J. M., C. P. Huang, and H. E. Allen (2006). Predicting metals partitioning in wastewater treatment plant influents. **Water Research**, 40 (7): 1333-1340.
159. Zhang, H, H. J. Choi, and C. P. Huang (2006). Effects of important reaction conditions on landfill leachate treatment by Fenton process. **Fresenius Environmental Bulletin**, 15 (1): 43-47.
160. Chang, J. H., Z. M. Qiang, and C. P. Huang (2006). Remediation and stimulation of selected chlorinated organic solvents in unsaturated soil by a specifically enhanced electrokinetics. **Colloids & Surfaces A: Physicochemical and Engineering Aspects**, 287(1-3): 86-93.
161. Weng, Y. H., K. C. Li, L. H. Chaung-Hsieh, and C.P. Huang (2006). Removal of humic substances (HS) from water by electro-microfiltration (EMF). **Water Research**, 40: 1783-1794.
162. Tseng, Y. H., H. Y. Lin, C. S. Kuo, Y.Y. Li, and C. P. Huang (2006). Thermostability of nano TiO_2 and its photocatalytic activity, **Reaction Kinetics and Catalysis Letters**, 89 (1): 63-69.
163. Lin, H. Y., C. P. Huang, W. Li, C. C. Ni, and S. I., Shah (2006). Size dependency of nanocrystalline TiO_2 on its optical property and photocatalytic reactivity exemplified by 2-chlorophenol. **Applied Catalysis: B. Environmental**, 68 (1-2): 1-11. (704)
164. Zhang, H; H. J. Choi, and C. P. Huang (2006). Treatment of landfill leachate by Fenton's reagent in a continuous stirred tank reactor. **J. Hazardous Materials**, 136 (3): 618-623.
165. Saxe, J. P.; B. L. Lubenow, P.C. Chiu, C. P. Huang, and. D. K. Cha (2006). Enhanced biodegradation of azo dyes using an integrated elemental iron-activated sludge system: I. Evaluation of system performance. **Water Environment Research**, 78 (1): 19-25.
166. Saxe, J. P.; B. L. Lubenow, P.C. Chiu, C. P. Huang, and. D. K. Cha (2006). Enhanced biodegradation of azo dyes using an integrated elemental iron-activated sludge system: II. Effects of physical-chemical parameters. **Water Environment Research**, 78 (1): 26-30.
167. Zhang, H; H. J. Choi, and C. P. Huang (2006). Effects of important reaction conditions on landfill leachate treatment by Fenton process. **Fresenius Environmental Bulletin**, 15 (1): 43-47.
168. Khan, E., C. P. Huang, and Brian E. Reed (2006). Hazardous waste treatment technologies. **Water Environment Research**, 78 (10): 1809-1855.

2007

169. Fan, M. C. P., Huang, T. A., Hatton, A. E., Bland, R. R., Judkins, and Z. L. Wang (2007). Application of nanotechnologies in separation and purification. **Separation and Purification Technology**, 58 (1): 1-1. (Preface)
170. Wang, D. M., C. P. Huang, J. G., Chen, H. Y., Lin, and S. I. Shah (2007). Reduction of perchlorate in dilute aqueous solutions over monometallic nano-catalysts: Exemplified by tin. **Separation and Purification Technology**, 58 (1): 129-137.
171. Lin, Y. T., M. Sung, P. F. Sanders, A. Marinucci, and C. P. Huang (2007). Separation of nano-sized colloidal particles using cross-flow electro-filtration**. Separation and Purification Technology**, 58 (1): 138-147. .
172. Kuo, C. S. Y. H., Tseng, H. Y., Lin, C. H., Huang, C. Y., Shen, Y. Y. Lin, S. I., Shah, and C. P. Huang (2007). Synthesis of a CNT-grafted TiO_2 nanocatalyst and its activity triggered by a DC voltage. **Nanotechnology**, 18 (46): Art. No. 465607.
173. Wang, J. M. C. P. Huang, and H. E. Allen (2007). Effect of pH on metal uptake by anaerobic sludge. **Environmental Engineering Science**, 24 (8): 1095-1104.
174. Huang, C. P. (2007). Environmental nanotechnology: A Near-term opportunity assessment. **Water Environment Research**, 79 (9): 939-939.(Editorial)
175. Li, N. M. H. Fan, J. van Leeuwen, B. Saha, H. Q., Yang, and C. P. Huang (2007). Oxidation of As(III) by potassium permanganate. **J. Environmental Sciences-China**, 19 (7): 783-786.
176. Zhang, H., M. Jiang, M. H. Sung, and C. P. Huang (2007). Mathematical modeling of gaseous ozone transport for in-situ chemical oxidation**. Fresenius Environmental Bulletin**, 16 (6): 617-620.
177. Sung M. H., C. P. Huang, Y. H. Weng, Y. T. Lin, and K. C. Li (2007). Enhancing the separation of nano-sized particles in low-salt suspensions by electrically assisted cross-flow filtration. **Separation and Purification Technology**, 54 (2): 170-177.

178. Sung M. H. and C. P. Huang (2007). Kinetics of the degradation of 2-chlorophenol by ozonation at pH 3. **J. Hazardous Materials**, 141 (1): 140-147.
179. Kim, I. K., S. Hong, I. Hwang, D. Kwon, J. Kwon, and C. P. Huang (2007). TOC and THMFP reduction by ultrasonic irradiation in wastewater effluent. **Desalination**, 202 (1-3): 9-15.
180. Dong, C. D., Y. L., Liao, C. M. Kao, C.W. Chen, H. Y., Lin, and C. P. Huang (2007). Preparation of crystalline nanosized titania by microemulsion: Evaluation of process variables. **Advanced Oxidation Technology**, 10 (2): 399-404.
181. Huang, C. P. and P. S. Myoda (2007). Sonochemical treatment of wastewater effluent for the removal of pathogenic protozoa exemplified by *Cryptosporidium*. **Practice Periodical of Hazardous, Toxic, and Radioactive Waste Management,** ASCE 11(2): 114-122. (Wesley W. Horner Award, ASCE).
182. Khan, E. M. H. Li, and C.P. Huang (2007). Hazardous waste treatment technologies. **Water Environment Research**, 45: 1858-1902.
183. Wang, D.M., C.P. Huang, J.G. Chen, H.Y. Lin and S.I. Shah (2007). Reduction of perchlorate in dilute aqueous solutions over monometallic nano-catalysts: Exemplified by tin. **Separation and Purification Technology,** 58 (2007) 129 -137.
184. Kim, I. K. and Huang, C.P. (2007). Sonochemical process for the removal of DBPS andprecursors in water. **J. Environmental Engineering & Management**,17(1): 39.

2008

185. E. Khan, M. Li, and C.P. Huang (2008). Hazardous waste treatment technologies. **Water Environment Research**, 80:1654-1708.
186. Wang, D. M. and C. P. Huang (2008). Electrodialytically-assisted catalytic reduction (EDACR) of perchlorate in dilute aqueous solutions. **Separation and Purification Technology**, 59(1): 33-0-341.
187. Wang, D. M., S. I. Shah, J. G. Chen, and C. P. Huang (2008). Catalytic reduction of perchlorate by H_2 gas in dilute aqueous solutions. **Separation and Purification Technology**, 60(1):14-21.
188. Mahmudov, R. Y. Y. Shu, S. Rykov, J. G. Chen and C. P. Huang (2008). The reduction of perchlorate by novel hydrogenation catalysts. **Applied Catalysis, B. Environment**, 81(1-2):78-87.
189. Li, M. H. M. Boggs, T. P. Beebe, and C. P. Huang (2008). Oxidation of single-walled carbon nanotubes in dilute aqueous solutions by ozone as affected by ultrasound. **Carbon**, 46(3):446-475.
190. Wang, Jianmin, T. Wang, J. G. Burken, C. C. Chusuei, H. Ban, K. Ladwig, and C.P. Huang (2008). Adsorption of arsenic(V) onto fly ash: A Speciation-based approach. **Chemosphere**, 72(3):381-388.
191. Sung. M. H. and C. P. Huang (2008). Ozonation of pentachlorophenol in unsaturated soils. **J. Contaminant Hydrology**, 98(3-4):75-84.
192. Hsieh, L, H, W. Chiang, Y. H. Weng, C. P. Huang, and K. C. Li , (2008). Removal of arsenic from groundwater by electro-ultrafiltration. **Desalination,** 234 (1-3): 402-408.
193. Lin, Y. T. and C. P. Huang (2008). Reduction of chromium (VI) by pyrite in dilute aqueous solutions. **Separation and Purification Technology,** 63(1):191-199.
194. Lin H, A. K. Rumaiz, M. Schulz, D. M. Wang, R. Rock, C. P. Huang and S. I. Shah (2008). Photocatalytic activity of pulsed laser deposited TiO_2 thin film. **Materials Science and Engineering B-Advanced Functional Solid-State Materials**, 151(2): 133-139.
195. Qiang, Z M, W. Ben, and C. P. Huang (2008). Fenton process for degradation of selected chlorinated aliphatic hydrocarbons exemplified by trichloroethylene, 1,1,-dichloroethylene and chloroform. **Frontiers of Environmental Science and Engineering, China** 2(4):397-409.

2009

196. Hou, Y. N., J. H. Qu, X. Zhao, P. Lei, D. Wan, and C. P. Huang (2009). Electro-photocatalytic degradation of acid orange II using a novel TiO_2/ACF photoanode. **The Science of Total Environment**, 407(7): 2431-2439.
197. Zhang, H., H. J. Choi, P. Cazano, and C.P. Huang (2009). Multivariate approach to the Fenton process for the treatment of leachate. **J. Hazardous Materials**, 161(2-3): 1306-1312.
198. Hermosilla, Daphne, Manuel Cortijo, and C. P, Huang (2009). Optimizing the treatment of landfill leachate by conventional Fenton and photo-Fenton processes. **The Science of Total Environment** 407: 3473-3481 (284).
199. Wang, D. M. Wang, H. Y. Lin, S. I. Shah, C. Y. Ni, and C. P. Huang (2009). Indirect electrochemical reduction of perchlorate and nitrate in dilute aqueous solutions at the Ti-water interface. **Separation and Purification Technology,** 67:127-134.
200. Zhou, Bin, Meghan Schulz, H. Lin, S. Ismat Shah, Jiuhui Qu, and C.P. Huang (2009). Photoeletrochemical generation of hydrogen over carbon-doped TiO_2 photoanode. **Applied Catalysis. B. Environment**, 92(1-

2):41-49.

201. Chiang, P. C., E. E. Chang, P. C. Chang and C. P. Huang (2009). Effects of pre-ozonation on the removal of THM precursors by coagulation**, The Science of Total Environment,** 407(21): 5735-5742.
202. Chang, J. H., Z. M. Qiang, C. P. Huang, E. Huang, V. Amanda (2009). Phenanthrene removal in unsaturated soils treated by electrokinetics with different surfactants-Triton X-100 and rhamnolipid. **Colloid and Surfaces A-Physicochemical and Engineering Aspects**, 348(1-3):157-163.
203. Li, M. H., R. Mahmudov, and C. P. Huang (2009). Hazardous waste treatment technologies. **Water Environment Research**, 81(10):1817-1835.
204. Weng, Y.H., H. J. Wei, T. Y. Tsai, and C. P. Huang (2009). Separation of acetic acid from xylose by nanofiltration . **Separation and Purification Technology**, 67(1):95-102.
205. Tseng, Y. H., Kuo, C. S., Y. Y. Li, C. P. Huang (2009). Polymer-assisted synthesis of hydroxyapatite nanoparticle. **Materials Science & Engineering C-Biomimetic and Supermolecular Systems**, 29(3):819-822.
206. Zhang, H, H.J. Choi, P. Canazo, and C. P. Huang (2009). Multivariate approach to the Fenton process for the treatment of landfill leachate. **J. Hazardous Materials**, 161 (2-3): 1306-1312.
207. Hermosilla, D., M. Cortijo, and C. P. Huang (2009). The role of iron on the degradation and mineralization of organic compounds using conventional Fenton and photo-Fenton processes. **Chemical Engineering Journal**, 155 (3): 637-646.

2010

208. Li, M. H. and C. P. Huang (2010). Hazardous waste treatment technologies. **Water Environment Research**, 82(10):1720-1747.
209. Mahmudov R. and C. P. Huang (2010). Perchlorate removal by activated carbon adsorption. **Separation and Purification Technology**, 70(3):329-337.
210. Lin, H., A.K. Rumaiz, M. Schulz, C. P. Huang, and S. Ismat Shah (2010). Hydrogen generation under visible light using nitrogen doped titania anodes. **J. Applied Physics,** 107, 124305.
211. Weng, Y. H., H. J. Wei, T. Y. Tsai, T. H. Lin, T. Y., Wei, G. L. Guo, G.L. and C. P. Huang (2010). Separation of furans and carboxylic acids from sugars in diluted acid rice straw hydrolyzates by nanofiltration. **Bioresource Technology**, 101(13):4889-4894.
212. Chiang, P. C., E.E. Chang, and C.P. Huang (2010). Evaluating and elucidating the formation of nitrogen-contained disinfection by-products during pre-ozonation and chlorination. **Chemosphere,** 80 (3): 327-333.
213. Chang, E. E., H. C. Guo, I. S., Li, P. C. Chiang, and C. P. Huang (2010). Modeling the formation and assessing the risk of disinfection by-products in water distribution systems. **J. Environmental Science and Health, Part A-Toxic/Hazardous Substances & Environmental Engineering**, **45(10):** 1185-1194.
214. Doong, R. A., T. C. Hsieh, and C. P. Huang (2010). Photoassisted reduction of metal ions and organic dye by titanium dioxide nanoparticles in aqueous solution under anoxic conditions. **The Science of the Total Environment, 408**: 3334-3341.
215. Minghua Li, and C.P. Huang (2010). Stability of oxidized single-walled carbon nanotubes in the presence of simple electrolytes and humic acid. **Carbon, 48**: 4527- 453.
216. Zhou, B., X. Zhao, H. J. Liu, J. H. Qu, and C.P. Huang (2010). Visible-light sensitive cobalt-doped BiVO4 (Co-$BiVO_4$) photocatalytic composites for the degradation of methylene blue dye in dilute aqueous solutions. **Applied Catalysis B: Environmental, 99:** 214–221(206).
217. Mahmudov, Rovshan and C. P. Huang (2010). Perchlorate removal by activated carbon adsorption, **Separation and Purification Technology** 70, 329 - 337.

2011

218. Mahmudov, Rovshan and C. P. Huang (2011). Selective adsorption of oxyanions on activated carbon exemplified by Filtrasorb 400 (F400), **Separation and Purification Technology** 77, 294-300.
219. Li, Minghua and C.P. Huang (2011). The responses of *Ceriodaphnia dubia* toward multi-walled carbon nanotubes: Effect of physical–chemical treatment, **Carbon** 49:1672-1679.
220. Zhou, Bin, X. Zhao, Huijuan Liu, Jiuhui Qu, and C. P. Huang (2011). Synthesis of visible-light sensitive M–$BiVO_4$ (M=Ag,Co,andNi) for the photocatalytic degradation of organic pollutants, **Separation and Purification Technology, 77**: 275–282.
221. Li, Minghua, Kirk J. Czymmek, and C.P. Huang (2011). Responses of *Ceriodaphnia dubia* to TiO_2 and Al_2O_3 nanoparticles: A dynamic nano-toxicity assessment of energy budget distribution, **Journal of Hazardous Materials** 187: 502–508.
222. Metzler, David M., Minghua Li, Ayca Erdem, and C.P. Huang (2011). Responses of algae to photocatalytic

nano-TiO_2 particles with an emphasis on the effect of particle size. **Chemical Engineering Journal,** 170 (2-3): 538-546.

223. Li, Minghua, R. Mahmudov and C. P. Huang (2011). Hazardous Waste Treatment Technologies. **Water Environment Research,** 83(10): 1598-1632.
224. Chang, E. E., S Y. Yang, C. P. Huang, C. H. Liang, and P.C. Chiang (2011). Assessing the fouling mechanisms of high-pressure nanofiltration membrane using the modified Hermia model and the resistance-in-series model. **Separation and purification Technolog**y, 79(3): 329-336.

2012

225. Huang, C. P. and Chieh-shen Chu, (2012). Indirect Electrochemical Oxidation of Chlorophenols in Dilute Aqueous Solutions. J. Environmental Engineering-ASCE. 138(3): 375-385.
226. Chang E. E., Liang Chung-Huei, Huang Chin-Pao, P. C. Chiang (2012). A simplified method for elucidating the effect of size exclusion on nanofiltration. **Separation and Purification Technology**, 85: 1-7.
227. Huang C. P. and Herschel A. Elliott (2012). Technology for sustainable water environment Preface. **Separation and Purification Technology**, 84(SI): 1-2.(Preface)
228. Yen-Ping Peng, Emre Yassitepe, Yun-Ta Yeh, Inci Ruzybayev, S. Ismat Shah, and C. P. Huang. Photoelectrochemical degradation of azo dye over pulsed laser deposited nitrogen-doped TiO_2 thin film. **Applied Catalysis, B: Environment,** 125, 465-472 (2012).
229. Yen-Ping Peng, Yun-Ta Yeh, S. Ismat Shah, and C. P. Huang. Concurrent photoelectrochemical reduction of CO_2 and oxidation of methyl orange using nitrogen-doped TiO_2 thin film**. Applied Catalysis, B. Environment,** 123, 414-423 (2012)**.**
230. Weng Y. H, Wang, Y. C., Tsai, Y. T.,Chuang, C. J., Huang, C. P. and Li, K. C. Effect of hydrophobicity of humic substances on electro-ultrafiltration. **Desalination** 284, 128-134 (2012).
231. Chang, Ming-Chin, Huang, C. P., Shu, H.Y., Chang, Y.C.. A new photocatalytic system using steel mesh and cold cathode fluorescent light (CCFL) for the decolorization of azo dye Orange G. **International Journal of Photoenergy**, DOI: 10.1155/2012/303961(2012).
232. Chang, E.E., Liu, T. Y., Huang, C. P. and Chiang, P.C. Degradation of mefenamic acid from aqueous solutions by the ozonatin and O_3-UV process. **Separation and Purification Technology**, 98, 123-129 (2012).
233. Chang, E. E., Chang, Y. C., Liang, C. H., Huang, C. P. and Chiang, P.C. Identifying the rejectin mechanism for nanofitraton membrane fouled by humic acid and calcium ions exemplified by acetaminophen, sulfamethoxazole and triclosan. **J. Hazardous Materials**, 221, 19-27 (2012).
234. Metzler, David M. Erdem, Ayca, Tseng, Y. H. and Huang, C. P. Responses of algal cells to engineered nanoparticles measured as algal cell population, chlorophyll a, and lipid peroxidation: Effect of particle size and type. **Journal of Nanotechnology**. Vol. 2012, ID 237284, 12 pp (2012).
235. Li, Yangang, Hsieh, Wen-Pin, Mahmudov, Rovshan, Wei, Xiaomei, and Huang, C.P. (2012). Combined ultrasound and Fenton (US-Fenton) process for the treatment of ammunition wastewater**. J. Hazardous Materials,**244-245, 403-411(2012).
236. Wang, Po-Yen, Shah, Ismat, Huang, C. P. A perchlorate-selective electrode for the detection of perchlorate at the sub-micro-molar Levels in water. **Analytical Metods**.5 (4):3530-3537 (2012).

2013

237. Li, M. H. Hsieh, T. C. Hsieh Doong, R. A. and Huang, C. P. (2013). Tuning the adsorption capability of multi-walled carbon nanotubes to polar and non-polar organic compounds by surface oxidation. **Separation and Purification Technology**, 117: 98-103.
238. Peng, Y.P. Yeh, Y. T. Yeh, Wang, P. Y. and Huang, C. P. (2013), A solar cell driven electrochemical process for the concurrent reduction of carbon dioxide and degradation of azo dye in dilute $KHCO_3$ electrolyte **(2013) Separation and Purification Technology, 117: 3-11.**
239. Lee, Yu-Chi, Lo, Shang-Lien, Kuo, Jeff and Huang, Chin-Pao (2013), Promoted degradation of perfluorooctanic acid by persulfate when adding activated carbon. **J. Hazardous Materials**, (2013). 261, 463-469.
240. Mahmudov, Rovshan; Li, Minghua; Huang, C.P. **Water Environment Research**, 2013 Literature Review, pp. 1614-1643.

2014

241. Fang, R. M., Huang, Y. C., Gousek, M., Huang, C.P. and Sherrier, J., Responses of rhizobia systems to nano-

TiO_2.Science of Total Environment, 466–467: 503–51(2014).

242. Huang, Y. C., Fang, R. M., Gousek, M., Sherrier, J., Huang, CP. Impacts of nnao-Zno on the rhizobia systems. **Science of Total Environment** 497-498: 78-90 (2014).
243. Po-Yen Wang, Ismat Shah, and C. P. Huang. Preparation and characterization of functionalized poly(vinyl chloride) membranes for selective separation of perchlorate from water**. J. Membrane Science,** Journal of Membrane Science 476(2015)561–570(2014).
244. Erdem, Ayca, Metzler, David, Cha, Daniel K., and Huang, C. P. Inactivation of bacteria by nano-TiO_2 in the absence of light exemplified by *E. coli* and *B. subtilis*. **International Journal of Environmental Science and Technology.** DOI 10.1007/s13762-014-0729-2(2014).
245. Mahmudov, Rovshan; Li, Minghua; Huang, C.P. **Water Environment Research**, 2014 Volume 85, Number 10, October 2013, pp. 1646-1677(32) (2014).

2015

246. Shih, Yu-Jen; Su, Chia-Chi; Huang, C. P. The synthesis, characterization, and application of a platinum modified graphite electrode (Pt/G) exemplified by chloride oxidation. **Separation and Purification Technology**. 156(SI, 3): 961-971 (2015).
247. Erdem, Ayca; Metzler, David; Cha, Daniel K.; Huang, C. P. The short-term toxic effects of TiO_2 nanoparticles toward bacteria through viability, cellular respiration, and lipid peroxidation. **Environmental Science & Pollution Research**, 17917-17924 (2015).
248. Erdem, A.; Metzler, D.; Cha, D; Huang, C. P. Inhibition of bacteria by photocatalytic nano-TiO2 particles in the absence of light. **International Journal of Environmental Science & Technology.** 12(9): 2987-2996 (2015).
249. Zhang, Gong; Hu, Ziyu**;** Sun, Meng**;** Liu, Yang; Liu, Limin**;** Liu, Huijuan**;** Huang, Chin-Pao; Qu, Jiuhui**;** Li, Jinghong. Formation of Bi_2WO_6 Bipyramids with Vacancy Pairs for Enhanced Solar-Driven Photoactivity. **Advanced Fundamental Materials.** 25(24): 3726-3734 (2015).
250. Mahmudov, Rovshan; Chen, Chinglung; Huang, Chin-Pao. Functionalized activated carbon for the adsorptive removal of perchlorate from water solutions. **Frontiers of Chemical Sciences & Enginering**. 9(2): 194-208 (2015).
251. Lin, Mingyu; Tseng, Yao Hsiang; Huang, Chin-Pao. Interactions between nano-TiO_2 particles and algal cells at moderate particle concentration. **Frontiers of Chemical Science and Engineering.** 9(2): 242-257 (2015).
252. Wang, Po-Yen; Shah, Ismat; Huang, C. P. Preparation and characterization of functionalized poly(vinyl chloride) membranes for selective separation of perchlorate from water. **J. Membrane Science**. 476:561-570 (2015).
253. Mahmudov, Rovshan; Li, Minghua; Huang, C. P. Hazardous Waste Treatment Technologies. **Water Environmental Research**. 87(10): 1445-1470 (2015).
254. Samadi, M.T., Azarian, G., Seifipour, F., Huang, C. P., Yang, D., Ali Poormohammadi. The formation of aldehydes and ketone ozonaton by-products and their variation through geneal water treatment plant in Hamadan, **Iranian Global NEST Journal**, 17(4): 682-691 (2015).
255. Fan, R.M., Zhu, B.Z., Huang, C.P., Sheng, Z.G., Mao, L. and Li, M.X. Different modes of synergistic toxicities between metam/copper (II) and metam/zinc (II) in HepG2 cells: apoptosis vs. necrosis. **Environmental Toxicolology**. doi: 10.1002/tox.22197 (2015).

2016

256. Su, JF, Ruzybayev, I. Ismat, S. Huang,C.P. The electrochemical reduction of nnitrate over micro-architectured metal electrodes with stainless steel scaffold. **Applied Catalysis, B: Environment** 180:199-29 (2016).
257. Lee, Yu-Chi; Chen, Meng-Jia; Huang, Chin-Pao. Efficient sonochemical degradation of perfluorooctanoic acid using periodate. **Ultrasound Sonochemistry.** 31: 499-505, (2016).
258. Lan, Huachun, He, Wenjing, Wang, Aimin, Liu, Ruiping, Liu, Huijuan, Qu, Jihui, Huang, C. P. An activated carbon fiber cathode for the degradation of glyphosate in aqueous solutions by the Electro-Fenton mode: Optimal operational conditions and the deposition of iron on cathode on electrode reusability. **Water Research** 105: 575-582, (2016).
259. Wang, TH, Cheng, YJ, Wu, YY, Lin, CA, Chiang, CC, Hsieh YK, Wang CF, Huang, C.P., Enhanced photoelectrochemical water splitting efficiency of hematite electrodes with aqueous metal ions as in situ homogenous surface passivation agents. **Physical Chemistry Chemical Physics**, 18(42): 29300-29307, (2016).
260. Zhang, G, Zhang, L, Liu Y. Liu, LM, Huang, CP, Liu HJ, Li, JH. Substitution Boosts Charge Separation for

High Solar-Driven Photocatalytic Performance. **ACS Applied Materials & Interfaces** 8(40): 26783-26793, (2016).

261. Shih, YJ; Su, CC; Chen, CW; Dong, CD; Huang, CP. Adsorption characteristics of nano-TiO_2 onto zebrafish embryos and its impacts on egg hatching. **Chemospher**e 154: 109-117, (2016).
262. Zhang, SL; Tao, LC; Zhang, YL; Wang, ZK; Gou, GJ; Jiang, M; Huang, CP; Zhou, ZW. The role and mechanism of K_2CO_3 and Fe_3O_4 in the preparation of magnetic peanut shell based activated carbon. **Power Technology** 295:152-160, (2016).
263. Liu, CF ; Huang, CP; Hu, CC; Juang, YJ ; Huang, CP. Photoelectrochemical degradation of dye wastewater on TiO_2-coated titanium electrode prepared by electrophoretic deposition. **Separation and Purification Technology** 165:145-153, (2016).
264. An, XQ; Li, T; Wen, B; Tang, JW; Hu, ZY; Liu, LM; Qu, JH; Huang, CP; Liu, HJ. New Insights into Defect-Mediated Heterostructures for Photoelectrochemical Water Splitting. **Advanced Energy Materials** 6(8):1502268 (2016).

2017

265 Shih, Yu-Jen; Huang, Yao-Hui; Huang, C. P. Oxidation of ammonia in dilute aqueous solutions over graphite-supported alpha- and beta-lead dioxide electrodes (PbO2@G). Electrochimica Acta: 444-454 (2017).

266 Chang, Hui-Hsien; Cheng, Tsun-Jen; Huang, Chin-Pao; Wang, Gen-Shuh. Characterization of titanium dioxide nanoparticle removal in simulated drinking water treatment processes. Science of the Total Environment 601: 886-894. (2017).

267 Chang, Jih-Hsing; Huang, Chin-Pao; Cheng, Shu-Fen; Shen, Shan-Yi. Transport characteristics and removal efficiency of copper ions in the electrodialysis process under electroconvection operation. **Process Safety & Environmental Protection** 112: 235-242 Part: B SI (2017).

268 Li, Minghua; Wang, Po Yen; Yu, Yu Han; Huang, CP. Hazardous Waste Treatment Technologies. **Water Environment Research** 89(10): 1461-1486 (2017).

269 Yang, Aili; Yang, Peng; Huang, C. P. Effect of Mg(II) on the Removal of Uranium from Low Radioactive Wastewater by Flocculation Using Polyacrylamide. **J. Hazardous Toxic & Radioactive Waste** 21(4):2153-5515 (2017).

270 Yang, Aili; Yang, Peng; Huang, CP. Preparation of graphene oxide-chitosan composite and adsorption performance for uranium. J**. Radioanalytica & Nuclear Chemistry** 313(2): 371-378 (2017).

271 Peng, Yen-Ping; Chen, Hanlin; Huang, C P. The Synergistic Effect of Photoelectrochemical (PEC) Reactions Exemplified by Concurrent Perfluorooctanoic acid (PFOA) Degradation and Hydrogen Generation over Carbon and Nitrogen codoped TiO2 Nanotube Arrays (C-N-TNTAs) photoelectrode. **Applied Catalysis B- Environmental** 209: 437-446 (2017).

272 Choi, Soohoon; Johnston, Murray V.; Wang Gen-Suh; Huang, C. P. Looking for engineered nanoparticles (ENPs) in wastewater treatment systems: Qualification and quantification aspects. **Science of the Total Environment** 590: 809-817 (2017).

273 Chao, Shu-Ju; Huang, Chin Pao; Chen, Pei-Chung; Huang, Chihpin. Teratogenic responses of zebrafish embryos to decabromodiphenyl ether (BDE-209) in the presence of nano-SiO2 particles. **Chemosphere** 178: 449-457 (2017).

274 Wang, Tsing Hai; Chiang, Chia-Che; Wu, Yi-Lin; Lin, Cheng; Cheng, Yu-Jung; Hsieh, Yi-Kong; Wang, Chu-Fang; Huang, CP. Characteristics of elemental carbon overlayers over hematite electrodes prepared by electrodeposition with organic acid additives. **Applied Catalysis B- Environmental** 207: 1-8 (2017)

275 Dai, Yung-Dun; Yuan, Ching; Huang, CP. Chiang, Pen-Chi. Regeneration of spent carbon nanotubes by electrochemical oxidation over RuO2/Ti electrode. **Separation & Purification Technology**178: 207-214 (2017).

276 Liu, Chunlei; Zhou, Wei); Song, Jiakun; Liu, Huijuan; Qu, Jiuhui; Guo, Lin; Song, Guofeng; Huang, Chin-Pao. Nanostructure-induced colored TiO2 array photoelectrodes with full solar spectrum harvesting **J. Materials and Chemistry A.** 5(7): 3145-3151 (2017).

277 Lee, Yu-Chi; Wang, Po-Yen; Lo, Shang-Lien; Huang, CP. Recovery of perfluorooctane sulfonate (PFOS) and perfluorooctanoate (PFOA) from dilute water solution by foam flotation. **Separation & Purification Technology** 173: 280-285 (2017).

2018

278 Zhu, ZQ; Huang, CP; Zhu, YN ; Wei, WH ; Qin, H . A hierarchical porous adsorbent of nano-alpha-Fe2O3/Fe3O4 on bamboo biochar (HPA-Fe/C-B) for the removal of phosphate from water. **J Water Process Engineering** 25 96-104 (2018)

279 Shih, YJ; Huang, YH; Huang, CP. In-situ electrochemical formation of nickel oxyhydroxide (NiOOH) on metallic nickel foam electrode for the direct oxidation of ammonia in aqueous solution. **Electrochimica Acta** 281: 410-419 (2018)

280 Chao, SJ; Huang, CP; Chen, PC; Chang, SH; Huang, CP. Uptake of BDE-209 on zebrafish embryos as affected by SiO2 nanoparticles. **Chemosphere** 205: 570-578 (2018)

281 Yang, AL; Zhu, YK; Huang, CP. Facile preparation and adsorption performance of graphene oxide-manganese oxide composite for uranium. **Scientific Reports** 8 Article Number: 9058 (2018)

282 Choi, S; Johnston, M; Wang, GS; Huang, CP. A seasonal observation on the distribution of engineered nanoparticles in municipal wastewater treatment systems exemplified by TiO2 and ZnO. **Science of the Total Environment** 625: 1321-1329 (2018)

283 Colades, JI; de Luna, MDG; Sumalinog, DAG; Huang, CP. Application of mathematical modeling and electrochemical iron dosing strategies to improve the treatment Performanee of the electro-Fenton process. **J. Cleaner Production** 181: 437-448 (2018)

284 Metzler, DM; Erdem, A; Huang, CP. Influence of Algae Age and Population on the Response to TiO2 Nanoparticles. **International J. of Environmental Research & Public Health** (4) Article Number: 585 (2018)

285 Yang, AL; Wu, JH; Huang, CP. Graphene Oxide-Cellulose Composite for the Adsorption of Uranium (VI) from Dilute Aqueous Solutions. **J. Hazardous Toxic & Radioactive Waste** 22 (2) Article Number: UNSP 04017029 (2018)

286 Shih, YJ; Huang, YH; Huang CP. Electrocatalytic ammonia oxidation over a nickel foam electrode: Role of $Ni(OH)_2$(s)-NiOOH(s) nanocatalysts. Electrochimica Acta 263: 261-271 (2018)

287 Liang, MN; Wang, DQ; Zhu, YN; Zhu, ZQ; Li, YH; Huang, CP. Nano-hematite bagasse composite for the removal of Pb(II) from dilute aqueous solutions . **J. Water Process Engineering** 21: 69-76 (2018)

288 Zhang, SL; Chen, HY; Tao, LC; Huang, CP; Jiang, M; Zhou, ZW. Magnetic Activated Carbon for Efficient Removal of Pb(II) from Aqueous Solution. **Environmental Engineering Scienc**e. 35(2): 111-120 (2018)

289 Dai, YD; Shah, KJ; Huang, CP; Kim, H; Chiang, PC. Adsorption of Nonylphenol to Multi-Walled Carbon Nanotubes: Kinetics and Isotherm Study. **Applied Sciences** 8(11): 2295 (2018).

290 Wang, JM; Wang, PY; Yu, YH; Su, JF; Huang, CP. Hazardous Wastes Treatment Technologies, **Water Environment Research**. 90(10): 1679-U1070 (2018)

2019

291 Fan, Ruemei; Chen, Ching-Lung; Lin, Jui-Yen; Tzeng, Jing-hua; Huang, Chih-pin; Dong, Chengdi; Huang, C. P. Adsorption characteristics of ammonium ion onto hydrous biochars in dilute aqueous solutions. **Bioresource Technology** 272:465-472 (2019).

292 Liu, Ching-Fang; Huang, C. P.; Juang, Yaju; Hu, Chi-Chang; Huang, Chihpin. Graphite Supported Stainless-Steel Electrode for the Degradation of Azo Dye Orange G by Fenton Reactions: Effect of Photo-Irradiation. **J. Environmental Engineering**. 145(1): 04018133 (2019).

293 Sajjadi, Baharak; Chen, Wei-Yin; Adeniyi, Adedapo; Mattern, Daniell L.; Mobley, Joel; Huang, Chin-Pao; Fan, Ruimei. Variables governing the initial stages of the synergisms of ultrasonic treatment of biochar in water with dissolved CO_2. **Fuel**. 235:1131-1145

294 Thanh Binh Nguyen; Huang, CP; Doong, Ruey. Photocatalytic degradation of bisphenol A over a $ZnFe_2O_4/TiO_2$ nanocomposite under visible light**. Science of the Total Environment**. 646 745-756 (2019).

295 Wang, TH, Lin, CA; Xu, S; Wang CF; Chen, CW; CD Dong; Huang, CP. Toward concurrent organics removal and potential hydrogen production in wastewater treatment: Photoelectrochemical decolorization of methylene blue over hematite electrode in the presence on Mn(II). **Applied Catalysis B: Environmental** 244:140-149 (2019)**.**

296 Colades, JJ; de Luna, MDG; Secondes, MFN, Huang, CP. Electrochemical in-situ hydrogen peroxide generation in a packed-bed reactor for Fenton oxidation of p-nitrophenol in aqueous solution. **Process Safety and Environmental Protection**, 123:161-168 (2019).

297 Shih, YJ; Dong, CD; Huang, YH; Huang, C. P. Electro-sorption of ammonium ion onto nickel foam supported highly microporous activated carbon prepared from agricultural residues (dried Luffa cylindrica). **Science of the Total Environment,** 673: 296-305 (2019)

298 Wang, PY; Huang, C. P. Catalytic Electrochemical Reduction of Perchlorate over Rh-Cu/SS and Rh-Ru/SS Electrodes in Dilute Aqueous Solution. **J. Environmental Engineering, ASCE** 145(8)**:** 04019046 (2019)

299 Chen, C.L; Park, SW; Su, JF; Yu, YH; Heo, JE; Kim, KD; Huang, C.P. The adsorption characteristics of fluoride on commercial activated carbon treated with quaternary ammonium salts (Quats)**. Science of the Total Environment.** 693: UNSP 133605. (2019)

300 Su, EF; Kuan, WF; Liu, HJ; Huang, CP. Mode of electrochemical deposition on the structure and morphology of bimetallic electrodes and its effect on nitrate reduction toward nitrogen selectivity**. Applied Catalysis B-Environmental.** 257: UNSP 117909 (2019)

301 Shih, YJ; Huang, CP; Chan, YH; Huang, YH. Electrochemical degradation of oxalic acid over highly reactive nano textured gamma- and alpha MnO2/carbon electrode fabricated by KMnO4 reduction on loofah sponge-derived active carbon**. J. Hazardous Materials.** 379: UNSP 120759 (2019)

302 Van-Truc, N; Thanh-Binh, N; Chen, CW; Hung, CM; Huang, CP; Dong, CD. Cobalt-impregnated biochar (Co-SCG) for heterogeneous activation of peroxymonosulfate for removal of tetracycline in water. **Bioresoure Technology.** 292: 121954. (2019)

303 Shabnam, N; Ahn, Y; Maksachev, A; Lee, JH; Huang, CP; Kim, H. Application of red-mud based ceramic media for phosphate uptake from water and evaluation of their effects on growth of Iris latifolia seedling. **Science of the Total Environment.** 688: 724-731 (2019)

304 Wang, JM; Shih, YJ. Wang, PY; Yu, YH; Su, JF; Huang, CP. Hazardous waste treatment technologies. **Water Environment Research**. 91(10): 1177-1198 (2019)

305 Xu, S; Wang, TH; Wang, CF; Chen, CW; Dong, CD; Huang, CP**.** The effect of crystal phase of manganese oxide on the capacitive deionization of simple electrolytes. **Science of the Total Environment.**675: 31-40 (2019)

306 Nguyen, TB; Doong, RA; Huang, CP; Chen, CW; Dong, CD. Activation of persulfate by CoO nanoparticles loaded on 3D mesoporous carbon nitride (CoO@meso-CN) for the degradation of methylene blue (MB). **Science of the Total Environment.** 675: 531-541(2019)

307 Yang, AL; Zhu, YK; Li, P; Huang, CP. Preparation of a magnetic reduced-graphene oxide/tea waste composite for high-efficiency sorption of uranium. **Scientific Reports.** 9: 647(2019)

308 Liu, CF; Huangb, CP; Hu, CC; Huang, CP. A dual TiO_2/Ti-stainless steel anode for the degradation of orange G in a coupling photoelectrochemical and photo-electro-Fenton system**. Science of the Total Environment.** 659: 221-229(2019)

309 Huang, ZJ; Gong, BN; Huang, CP; Pan, SY; Wu, PX; Dang, Z; Chiang, PC. Performance evaluation of integrated adsorption-nanofiltration system for emerging compounds removal: Exemplified by caffeine, diclofenac and octylphenol**. J. Environmental Management.** 231: 121-128 (2019)

310 Nguyen, TB; Huang, CP; Doong, RA. Enhanced catalytic reduction of nitrophenols by sodium borohydride over highly recyclable Au@graphitic carbon nitride nanocomposites**. Applied Catalysis B-Environmental.** 240: 337-347 (2019)

311

INVITED KEYNOTE PRESENTATION

1. "Role of Advanced Oxidation Process (AOP) in Drinking Water Treatment: Recent Advances and Future Potential." The Third Mainland-Taiwan Conference on Drinking Water Safety Control Technology and Management. National Chao Tung University, Taiwan, September 25 2006
2. "Sonochemical Processes for the Removal of DPBs and Precursors in Water" The Second International Conference on Sustainable Water Environment, National Taiwan University, October 27 2007
3. "Wastewater Reuse for the High-Tech Industries" Institute of Industrial Technology Research, Taiwan, October 29, 2007
4. "Remediation of Harbor and Marine Sediments: An Overview" National Kaohsiung Marine Technology University, September 28, 2006
5. "Survival of Bacteria in the Presence of Photocatalytic TiO2", December 14-15, 2007
6. " Photoelectrochemical technology for the degradation of hazardous chemicals and concurrent hydrogen generation in water" The Fifth International Conference on Sustainable Water Environment. Seoul, Korea, July 27-29, 2009
7. "Photoelectrochemcial process for the remediation of impaired water", 6th International Conference on Urban Watershed Management and Resource Utilization, Nan Chang University, Nang Chang, China, March 31-April 1, 2009
8. "Photoelectrochemical Processes for the Removal of Trace Organic Contaminants from Water", International Conference on Drinking Water, National Taiwan University, Taipei, April 27, 2009

9. "Recent Advances in Catalytic-Electrochemical and Photo-electrochemical Reactions for Water Purification and Beyond" Division of Environmental Chemistry, 248 National Meeting, American Chemical society, August 10-14, 2014. San Francisco, CA.
10. "Electrochemical and Photoelectrocheical Processes for Water Purification and beyond". Asian-Pacific Wastewater Treatment and Reuse Conference. National University of Singapore, Singapore, 2015.
11. "Crystal Defects and Visible-light Photoreactivity", Division of Environmental Chemistry. 250 Annual meeting, American Chemical Society, Boston, MA, 2015.
12. "Physics for Water Purification", 9th International Conference on Challenges in Environmental Sciences and Engineering, Kaohsiung University of Marine Technology, November 2016.
13. "The Principle of Physics for Water Purification" 12th International Conference on Sustainable Water Environment, Kaohsiung University of Marine Technology, November 2016.
14. "Physics for Water Purification Exemplified by Light, Sound, and Electricity", 28th National Conference of Chinese Society of Environmental Engineering, Chanan University of Pharmacy, Tainan Taiwan, November 12, 2016.
15. "Electrocapilarity and Surface Acidity", Workshop on Water Reuse and Recycle, National Chao tung University, Shin Chu, Taiwan, November 24, 2016.

INVITED SEMINAR PRESENTATION

1. The Role of Phosphorus on the Eutrophication of the Great Lakes, Department of Civil Engineering, Michigan State University, March 1973.
2. Carbon Adsorption for the Treatment of Inorganic Chemical Wastewater, Union Carbide Co., April 1974.
3. The Removal of Inorganic Metals by Activated Carbon, Department of Civil Engineering, Stanford University, December 1975.
4. The Separation of Solid from Chemical Sludge, Du Pont Co., September 1976.
5. Heavy Metals in the Environment, Chemistry and Environment Committee, Delaware Section, Am. Chem. Soc., December 1976.
6. The Principles and application of Interfacial Phenomena to Water and Wastewater Treatment, Department of Environmental Engineering, National Cheng Kung University, January 1977.
7. The Principle and Application of Aqueous Chemistry, Department of Environmental Engineering, National Cheng Kung University, January 1977.
8. Adsorption Process for Heavy Metal Removal, Department of Civil Engineering, National Taiwan University, January 1977.
9. The Removal of Cadmium(II) by Activated Carbon Adsorption Process, Department of Civil Engineering, University of Rhodes Island, March 1978.
10. The Removal of Heavy Metals from Water by Activated Carbon, Swiss Institute of Water Resource and Pollution Control (EAWAG), Switzerland, September 1981.
11. The Adsorption Characteristics of Heavy Metals at the Hydrous Oxide Surface, Department of Geography and Environmental Engineering, The John Hopkins University, May 1984.
12. The Adsorption of Heavy Metals onto Hydrous Solids, Department of Environmental Engineering, National Cheng Kung University, December 1985.
13. The Removal of Heavy Metals by Activated Carbon, Institute of Chemical Engineering, Union Industrial Laboratory, December 1985.
14. The Effect of Organic Substances on the Adsorption Behavior of Heavy Metals by Hydrous Solid, Department of Civil Engineering, National Central University, December 1985.
15. Treatment Technologies for Heavy Metal Containing Wastes, Short Course on Toxic Waste Treatment, National Chung Hsing University, December 1985.
16. Specific Chemical Reactions at the Hydrous Solid-Electrolyte Interface, Department of Chemistry, University of Delaware, September 1986.
17. Treatment Technologies for Plating Wastes. State-of-the-Art, the 11th Modern Engineering Technology Seminar, Taipei, Taiwan, November 1986.
18. Management Alternatives for Plating Waste, the 11th Modern Engineering Technology Seminar, Taipei, Taiwan, December 1986.
19. Photocatalytic Oxidation of Organics, Department of Civil and Mining Engineering, University of Minnesota, Minneapolis, MT, March 1987.
20. Interface and Interfacial Properties, Workshop on Heavy Metals in the Environment: Effect, Fate and Control, National Chung Hsing University, Taichung, Taiwan, December 27-30, 1988.

21. Theories of Adsorption, Workshop on Heavy Metals in the Environment: Effect, Fate and Control, National Chung Hsing University, Taichung, Taiwan, December 27-30, 1988.
22. Modeling the Transport of Heavy Metals in Saturated Soil, Workshop on Heavy Metals in the Environment: Effect, Fate and Control, National Chung Hsing University, Taichung, Taiwan, December 27-30, 1988.
23. Control Strategies and Technologies for Heavy Metals, Workshop on Heavy Metals in the Environment: Effect, Fate and Control, National Chung Hsing University, Taichung, Taiwan, December 27-30, 1988.
24. Some Chemical Reactions at the CdS(s)-Water Interfaces, Institute of Environmental Studies, Drexel University, Philadelphia, PA, May 9, 1989.
25. Physical-chemical Treatment of Industrial Wastewater, Bureau of Environmental Protection, Taiwan, Republic of China, January 1990.
26. Photocatalytic oxidation of Phenols, Graduate Institute of Environmental Engineering, National Taiwan University, Taipei, Taiwan, January, 1990.
27. Technical Aspects of Transparency as a Regulatory Criterion for Specific Industrial Wastewater Effluent in the Republic of China, Bureau of Environmental Protection, Taiwan, Republic of China, January, 1990.
28. Some Specific Chemical Interactions at the Solid-Water Interface, National Research Institute of Science, University of Quebec, April 1992.
29. Use of Advanced Chemical Oxidation (AOP) for the Removal of Chlorinated Organic Compounds in Water, Department of Chemical Engineering, Drexel University, April, 1993.
30. Future Trends in Environmental Engineering Research, Chinese Petroleum Company, August 1994.
31. Advanced Chemical Oxidation Processes, National Chao Tung University, May 1995.
32. Adsorption of Heavy Metals at Flyash Surface, National Cheng Kung University, July 1995.
33. Advanced Chemical Oxidation Processes for the Treatment of Hazardous Wastes, Korea Institute of Environmental Research, Korea, May 1995.
34. Removal of Hazardous Organics from Water by Advanced Chemical Oxidation, Hong Kong University of Science and Technology, Hong Kong, April 1995.
35. Design and Operation of Sanitary Landfill, Taiwan Provincial Environmental Protection Bureau, Taipei, April 1995.
36. In-situ Remediation of Heavy Metal Contaminated Soils, Taiwan Provincial Environmental Protection Bureau, Taipei, April 1995.
37. Advanced Chemical Oxidation, Hong Kong University of Science and Technology, Hong Kong, May 1996
38. *Cryptosporidium*: The Invisible Ooyst, National Institute of Environmental Research, Seoul, Korea, October 1998
39. Fate and Transport of Heavy Metals in Municipal Wastewater Treatment Plant, Korea Institute of Science and Technology, October 1998.
40. Recent Advances in AOP Technology, (Key Note) Korea Environmental Science and Technology Association, 1998 Annual Meeting, Taegu, Korea, October 1998
41. Removal of Trace Contaminants from Water. Hercules Chemical Co., Travose, PA, April 2001.
42. Advanced Chemical Oxidation Processes for the Removal of Organic Contaminants from Water, Department of Chemical Engineering, National Taiwan University, Taipei, Taiwan, 2002
43. Opportunities and Challenges of Nanotechnology, Center of Environmental Health and Safety, Industrial Technology Research Institute, Hsin-chu, Taiwan, 2003
44. Nanotechnology and the Environment, Department of Environmental Engineering, Dayeh University, Changhua, Taiwan, 2005.
45. Nanomaterials and Nanotechnology: Opportunities in Environmental Engineering, Health and Safety, Industrial Technology Research Institute, Hsin-chu, Taiwan, 2005.
46. Environmental Issues of Nanotechnologies. Research Center of Eco-Environmental Science, Chinese Academy of Science, Beijing, China, July 2005.
47. Environmental Controversies. Department of Environmental Engineering, National Chung Hsing University, June 2006.
48. Global Warming and CO_2" Environmental Protection Administration, Taipei, August, 2006.
49. Emerging Contaminants and their Control. Chung Hsina Consultant Engineering Co. Taipei, September, 2006.
50. Nano-materials/Technology and the Environment. Ta-yeh University, August, 2006
51. Nano-materials/Technology and the Environment. Department of Civil and Environmental Engineering, Iowa State University, IW, March, 2006.

52. Sonochemical Process for the Removal of Selected Organic Compounds and Pathogens in Water. National Kaohsiung Polytechnic University, September; 2006.
53. Survivals of Microorganisms when exposing to nano-photocatalytic TO_2. Department of Civil and Environmental Engineering, March, 2006 Lehigh University, Bethlehem, PA
54. Global Warming and Related Issues. Department of Civil and Environmental Engineering, National Kaohsiung University, July 2007.
55. Environmental Applications and Implications of Nanotechnology. Department of Civil and Environmental Engineering, National Kaohsiung University, July 2007.
56. Sonochemical Processes for the Controlof Emergin Contaminants in Water. Department of Ecological Engineering, Yi-Sou University, Kaohsiung, Taiwan, July 2007.
57. Removal of perchlorate from water by catalytic electro-reduction. National Kaohsiung University, Kaohsiung, Taiwan, June 2007
58. Research Trend in Sustainable Water Supply. Industrial Technology Research Institute, June 2007.
59. On the Rising Tide of Water Market. Industrial Technology Research Institute, June 2007.
60. Research Opportunities of Environmental Nanotechnology, Kaohsiung University, June 2007.
61. Environmental Photocatalysis. Department of Environmental Medicine and Environmental Science, National Chin Hua University, June 2007.
62. Research Needs toward Sustainability. National Chao-tong University, June 2007.
63. Global warming and its Impacts on Water Environment. Chinese Academy of Science, Beijing, China, November 2008.
64. Sonochemical Processes for the control of emerging contaminants. Nuclear Research Institute, Taiwan, 2008.
65. Remediation of Harbor Sediments for Reuse, Kaohsiung Harbor Administration, Taiwan, May 2008.
66. Photoelectrochemical technology for the degradation of hazardous chemicals and concurrent hydrogen generation in water. The Fifth International Conference on Sustainable Water Environment. Seoul, Korea, July 27-29, 2009.
67. Photoelectrochemcial process for the remediation of impaired water. 6th International Conference on Urban Watershed Management and Resource Utilization, Nan Chang University, Nang Chang, China, March 31-April 1, 2009.
68. Photoelectrochemical Processes for the Removal of Trace Organic Contaminants from water. International Conference on Drinking Water, National Taiwan University, Taipei, April 27, 2009.
69. Interfacial phenomena and the next forty year. **Keynote,** Aquatic Chemistry Workshop. National Chung Hsing University, Taichung, Taiwan, October 4, 2010
70. Advanced oxidation for the remediation of impaired water. **Keynote**, Symposium Honoring Professor D. F. Yen, Department of Civil and Environmental Engineering, Southern California University, October 21, 2010.
71. Advanced Oxidation Processes for the Remediation Impaired Water, **Keynote**, International Conference on Advanced Oxidation Technology, Tung Hai University, June 27, 2010
72. Photoelectrochemcial process for the remediation of impaired water, Graduate Institute of Environmental Engineering, National Chao Tung University, Hsin Chu, Taiwan, October 5, 2010
73. Climate change and Sustainable Water Environment, National Taiwan University, June 29, 2009.
74. Chemistry and the Water Environment: What Chemists Can Contribute to the Protection of the Water Environment?" Department of Chemistry and Biochemistry, November 23, 2010.
75. Advanced oxidation processes for the remediation of impaired water. Department of Civil and Environmental Engineering, University of California-Los Angeles, CA. October 22, 2010.
76. Treatment of Ammunition Wastewater Using Ultrasound-Fenton Process, Keynote, 2011 AICHE Annual Conference. Photo-Catalytic and Advanced Oxidation/Reduction Processes for Water Treatment, Minneapolis, MA October 18, 2011.
77. Water pollution technologies for the future, Institute of Industrial Technology Research, Taiwan, October 2011.
78. Advanced Oxidation Processes for the Reclamation of Impaired Water: Opportunities and Challenges. Keynote, 4th International Conference on Challenges in Environmental Science and Engineering, 25 - 30 September 2011, Tainan City, Taiwan
79. Responses of Aquatic Organisms to Engineered Nanoparticles: Effect of particle size and more, National Chung Kung University, Taiwan, September 26, 2011.

80. Solar energy for the purification/renovation of impaired water. 3th Conference on Green Sustainable Energy, Taipei, Taiwan, June 30, 2012.
81. Solar energy for the purification and renovation of impaired water. 8th International Conference on Sustainable Water Environment. Guilin, China, July 17-18, 2012.
82. Chemical Interactions at the Solid-Water Interfaces. Tong Ji University, July 10, 2012
83. Chemical Interactions at the Solid-Water Interfaces. Chung Qing University, Chung Qing, China, July 17, 2012.
84. Chemical Interactions at the Solid-Water Interfaces. Guilin University, July 20, 2012
85. Impacts of Nano-TiO_2 on Rhizobia-legume symbiosis, National Chao Tong University, December 17, 2014.
86. Impacts of Nano-TiO_2 on Rhizobia-legume symbiosis, National Kaohsiung University of Marine Technology, Kaosiung, Taiwan, December 14, 2014.
87. The issue of perchlorate and its control, National Chao Tung University, Shin Chu, Taiwan, 2016.
88. The Issue of perchlorate and its Control, National Chi Nan University, Shiuw Li, Taiwan, 2016.
89. The Principle of Physics and its Application in Water Purification and beyond, Institute of Green Technology, Chinese Peteroleum Company, Kaohsiung, Taiwan, 2016.
90. The Principle of Physics and its Application in Water Treatment, Graduate Institute of Environmental Engineering, National Taiwan University, October 2016.

CONFERENCE PRESENTATION

1. Heterogeneous Metal Ion Buffers, 158th National Meeting, Am. Chemical Soc., New York, NY, September 1969.
2. The Adsorption Characteristics of Calcium Ions at γ-Al_2O_3-Electrolyte Interface, Annual Meeting, Am. Geophysics Union, San Francisco, CA, December 1971.
3. Thee Specific Adsorption of Cations at the Solid-Solution Interface, 163th National Meeting, Am. Chemical Soc., Boston, MA, March 1971.
4. Specific Adsorption of Phosphate and Silicate at Hydrous Aluminum Oxide- Electrolyte Interface, 164th National Meeting, Am. Chemical Soc., New York, NY, March 1972.
5. The Role of Microorganism in Energy Conversion, Annual Meeting, Michigan Academy of Arts, Science and Letters, East Lansing, MI, April 1973.
6. The Regeneration of Activated Carbon for Chromium Removal, 31st Purdue Industrial Waste Conference, West Lafayette, IN, May 1975.
7. The Effect of Emulsion-Solid Interaction on Oil Weathering, Symposium on Modeling of Transport Mechanism in Ocean and Lakes, Environment Canada, Burlington, Ontario, Canada, October 1975.
8. The Fate of Trace Metals in Soil-Water Systems, Symposium on the Transport of Solute in Subsurface Water, Am. Geophysics Union, San Francisco, CA, December 1975.
9. The Electrical Double Layer of γ-Al_2O_3-Electrolyte Interface, 50th International Conference on Colloid Science, Puerto Rico, June 1976.
10. Solid-Solution Interface. It's Role in Controlling the Chemical Composition of Natural Waters, Am. Institute of Chemical Engrs, Atlantic City, NJ, August 1976.
11. The Removal of Cadmium from Dilute Aqueous Solution, National Meeting, Am. Chemical Soc. New Orleans, LA, March 1977.
12. The Removal of Trace Metals from Municipal Sludge, the 11th Mid-Atlantic Regional Meeting, Am. Chemical Soc., Newark, DE, April 1977.
13. Adsorption Characteristics of NTA at Solid-Solution Interface, 51st Colloid & Surface Science Symposium, Grand Island, NY, June 1977.
14. The Kinetics of CdS Oxidation, Annual Meeting, Am. Soc. Limnology and Oceanography, Corpus Christi, TX, January 1978.
15. The Effect of Suspended Solids on the Microbial Uptake of Glycine, Annual Meeting, Am. Soc. Limnology and Oceanography, Corpus Christi, TX, January 1978.
16. The Use of Activated Carbon for Cr(VI) Removal, 9th International Conference on Water Pollution Research, Stockholm, Sweden, June 1978.
17. The Adsorption Characteristics of Cu(II) Complexes on Hydrous Oxides, 52nd Colloid & Surface Symposium, Knoxville, TN, June 1978.
18. The Removal of Heavy Metals from Municipal Sludge, 8th National Conference on Municipal Sludge Management, Miami, FL, March 1979.

19. The Effect of Turbulence on the Emulsification of Crude Oils, Workshop on the Physical Behavior of Oil in the Marine Environment, Princeton, NJ, May 1979.
20. The Treatment of Cd(II) Plating Wastewater by Activated Carbon Adsorption, National Conference on Environmental Engineering, Am. Soc. Civil Engrs, San Francisco, CA, July 1979.
21. The Adsorption Characteristics of Co(II) onto Hydrous Solids in the Presence of Chelating Agents, National Meeting, Am.Chemical Soc., Houston, TX, March 1980.
22. Activated Carbon Process for the treatment of Cr(VI) Containing Industrial Wastewater, 10th International Conference on Water Pollution Research, Toronto, Canada, June 1980
23. Removal of Heavy Metal by Activated Carbon Adsorption Process, National Conference on Hazardous and Toxic Waste Management, New Jersey Institute of Technology, Newark, NJ, June 1980.
24. The Effect of Complex Formation on the Removal of Heavy Metals from Water and Wastewater, National Conference on Environmental Engineering, Am. Soc. Civil Engrs., New York, NY, July 1980.
25. The Chemical Behavior of Heavy Metals in Municipal Sludge, International Symposium on Environmental Pollution, Atlanta, GA, October 1980.
26. The Removal of Heavy Metals by Activated Carbon Process from Water and Wastewater, Some Preliminary Observation, U. S. Environmental Protection Agency, Seminar on the State-of-the-Art of Water Pollution Control, Cincinnati, OH, July 1981.
27. The Removal of Cd(II) and Hg(II)by Activated Carbon, National Conference on Environmental Engineering, Am. Soc. Civil Engrs, Atlanta, GA, June 1981.
28. Treatability of Cd(II) Plating Wastewater by Aluminosilicate Adsorption, 13th Mid-Atlantic Industrial Waste Conference, University of Delaware, Newark, DE, June 1981.
29. The Development of an Activated Carbon Adsorption Process for the Treatment of Cd(II) Plating Wastewater, International Conference on Heavy Metals in the Environment, Amsterdam, Netherlands (U.S. EPA Report, National Committee, IAWPCR), September 1982.
30. The Fate, Effect and Control of Cd(II) in Activated Sludge, International Conference of Heavy Metals in the Environment, Amsterdam, Netherlands, September 1982.
31. Specific Chemical Interactions between Complexed Heavy Metals and Hydrous Solids, 56th Colloid and Surface Science Symposium, VPI-Sate University, VA, July 1982.
32. Treatment of As(V) Containing Wastewater by Activated Carbon Process, 55th Annual Conference, Water Pollution Control Federation, St. Louis, MO, October 1982.
33. The Removal of Hg(II) from Water by Activated Carbon Process, National Meeting, Am. Institute of Chemical Engineers, Cleveland, OH, September 1982.
34. Removal of Cu(II), Zn(II), Pb(II) and Ni(II) from Water by Activated Carbon, 56th Annual Conference, Water Pollution Control Federation, Atlanta, GA, October 1983.
35. The Adsorption of Polyacetic Amino Acids at γ-Al_2O_3-Electrolyte Interface, National Meeting, Am. Chemical Soc., Seattle, WA, September 1983.
36. The Adsorption of Pb(II) onto Hydrous Solids as Affected by Complex Formation Agents, International Conference on Heavy Metals in the Environment, Heidelberg, W. Germany, September 1983.
37. The Removal of Cd(II) by Activated Carbon Adsorption as Affected by Complex Formation, International Conference on Heavy Metals in the Environment, Heidelberg, W. Germany, September 1983.
38. The Removal of Co(II) by Activated Carbon, National Meeting, Am. Institute of Chemical Engrs, Philadelphia, PA, September 1984.
39. The Removal of Heavy Metals by Activated Carbon Process from Water and Wastewater. In the Absence of Complex Formation, U. S. Environmental Protection Agency, Seminar on Adsorption, Cincinnati, OH, February 1984.
40. The Adsorption Characteristics of Zn(II) on Aluminosilicates, National Meeting, Philadelphia, PA, September 1984.
41. Factors Affecting the Adsorption of Complexed Heavy Metals on Hydrous γ-Al_2O_3, 12th Biennial International Conference, Association of Water Pollution Research, Amsterdam, Netherlands, September 1984.
42. The Adsorption Characteristics of Ni(II) onto Hydrous Oxides as Affected by Complex Formation Agent, Water Symposium, Gordon Research Conference, New Hampton, NH, June 1984.
43. The Adsorption Characteristics of Metal Ions onto Hydrous CdS(s) Surface, 58th Colloid and Surface Science Symposium, Potsdam, NY, June 1985.
44. The Removal of Ni(II) by Bubbles, National Conference of Environmental Engineering, Am. Soc. Civil Engrs, Boston, MA, July 1985.

45. The Oxidative Dissolution of Some Heavy Metal Sulfides by Dissolved Oxygen, National Meeting, Am. Chemical Soc. Chicago, IL, September 1985.
46. A Overview on the Heavy Metal Removal Capacity of Heavy Metals by Activated Carbon, International Conference of Heavy Metals in the Environment, Athens, Greece, September 1985.
47. Chemical Interaction between Cu(II) and Activated Sludge Particles, International Conference on Heavy Metal sin the Environment, Athens, Greece, September 1985.
48. The Oxidation of CdS(s) by Oxidation, International Conference on Heavy Metals in the Environment, Athens, Greece, September 1985.
49. Chemical Interactions between Some Heavy Metal Ions and Hydrous Solids, International Symposium on Heavy Metal Speciation, Separation and Recovery, Chicago, IL, July-August 1986.
50. Chemical Reactions between Some Transition Metals and CdS(s), 17th Annual Meeting, Fine Particle Society, San Francisco, CA, July-August 1986.
51. Photooxidative Dissolution of CdS(s) Particles in Water, 17th Annual Meeting, Fine Particle Society, San Francisco, CA, July-August 1986.
52. The Adsorption Characteristics of Cd(II) by Fungal Surface, Chapman Conference on Microbial Processes in the Transport, Fate and In-Situ Treatment of Subsurface Contaminants, Snowtown, UT, October 1986.
53. Chemical Interactions between Heavy Metals and Hydrous Solids, International Symposium on Metal Speciation, Separation and Recovery, Chicago, IL, July 1986.
54. Anodic Dissolution of Lead Sulfide Single Crystal, Annual Meeting, Environmental Chemistry Division, American Chemical Society, New Orleans, LA, August 1987.
55. Removal of Cadmium by Adsorption onto Fungal Biosorbent, Fine Particle Society, Boston, MA, July 1987.
56. Adsorption of Heavy Metals onto Hydrous CdS(s), Chemistry for the Protection of Environment, Torino, Italy, September 1987.
57. Photocatalytic Oxidation of Phenols, Oak Ridge Associate University Model Conference, Oak Ridge, TN, September 1987.
58. The Removal of Cd(II) from Dilute Aqueous Solutions, International Conference on Water and Wastewater Microbiology, Newport Beach, CA, February 1988.
59. Photocatalytic Oxidation of Phenols, International Conference on Hazardous Wastes, Atlantic City, NJ, May 1988.
60. The Dissolution of Some Heavy Metal Sulfides in Aqueous Solutions, 63rd Colloid and Surface Sciences Symposium, State College, PA, June 1988.
61. Treatment of Thio Organic Compounds by Photocatalytic Oxidation with Semi- Conductor CdS, AIChE Summer Meeting, Philadelphia, PA, August 1989.
62. The Removal of Heavy Metals by Crab Shell Adsorbent, AIChE Summer Meeting, Philadelphia, PA, August 1989.
63. Modeling the Transport of Solutes in Saturated Soil-Water System: A Microcomputer Software Program" AIChE Summer Meeting, Philadelphia, PA, August 1989.
64. Adsorption of Some Heavy Metals onto Activated Sludge Particulate, 7th International Conference on Heavy Metals in the Environment, Geneva, Switzerland, September 1989.
65. Removal of Heavy Metals by Fungal Adsorption Process, 7th International Conference on Heavy Metals in the Environment, Geneva, Switzerland, September 1989.
66. Effect of Complex Formation on the Removal of Heavy Metals by Activated Carbon Adsorption Process, 20th Annual Meeting of the Fine Particle Society, Boston, MA, August 1989.
67. The Effect, fate, and Control of Heavy Metals in the Environment, Chinese Institute of Engineers-USA, Annual Meeting, New York, NY, November 1989.
68. Removal of Trace Heavy Metals by Adsorption onto Fly Ash, National Conference on Environmental Engineering, American Society of Civil Engineers, Washington, DC, June 1990.
69. Proton Competition in Cu(II) Biosorption by Fungal Mycelia, National Conference on Environmental Engineering, American Society of Civil Engineers, Washington, DC, June 1990.
70. Anodic Oxidation of Phenols in Dilute Aqueous Solutions, National Conference on Environmental Engineering, American Society of Civil Engineers, Washington, DC, June 1990.
71. Photocatalytic Oxidation of Organic Compounds by CdS, National Conference on Environmental Engineering, American Society of Civil Engineers, Washington, DC, June 1990.
72. Dissolution of Chromium from Contaminated Soils, Workshop on Speciation and Contamination of Soil, Jerkily Island, GA, May 1991.

73. Use of Fenton Reagent for the Oxidation of Chlorophenols, Fourth World Congress of Chemical Engineer, Karlsruhe, Germany, June 1991.
74. Electrochemical Oxidation of Phenols in Dilute Aqueous Solution, First International Symposium on Chemical Oxidation, Vanderbilt University, Nashville, TN, February 1991.
75. Photocatalytic Oxidation Process for the Treatment of Organic Waste, First International Symposium on Chemical Oxidation, Vanderbilt University, Nashville, TN, February 1991.
76. Removal of Chromium by Concrete Materials, AIChE National Meeting, Los Angeles, CA, August 1991.
77. Photocatalytic oxidation of Phenols by TiO_2 Photocatalyst, AIChE National Meeting, Los Angeles, CA, August 1991.
78. Treatment of Textile Industrial Wastewater by Continuous Flow Fenton Reagent Oxidation Process, International Symposium on Advanced Oxidation, Vanderbilt University, Nashville, TN, February 1992.
79. Removal of TEL from Contaminated Soil by Surfactant Extraction, AIChE National Conference, August 1992.
80. Removal of Phenols from Soil by Supercritical CO_2 Fluid, AIChE National Conference, August 1992.
81. Removal of Nitrate from Water by Iron Reduction, Annual Meeting, Fine Particle Society, Chicago, IL, August 1993.
82. Electro-Fenton Processes for the Treatment of Chlorinated Chemicals, AIChE National Conference, Denver, CO, August 1994.
83. Recovery of Fe(II)-EDTA from Wet Scrubber, 26th Mid-Atlantic Industrial & Hazardous Waste Conference, University of Delaware, July 1994.
84. The Removal of Priority Pollutants from Groundwater by Advanced Oxidation Process, 26th Mid-Atlantic Industrial and Hazardous Waste Conference, University of Delaware, July 1994.
85. Sulfur Recovery from Caustic Sodium Sulfide Industrial Wastewater by Electrochemical Oxidation and Electrodialysis Processes, 26th Mid-Atlantic Industrial & Hazardous Waste Conference, University of Delaware, July 1994.
86. Recovery of Ferrous-chelates from Wet-Flue Gas Scrubbing Solution by Electrochemical Methods, 26th Mid-Atlantic Industrial & Hazardous Waste Conference, University of Delaware, July 1994.
87. The Feasibility Study of Lead Removal by Soil-Washing, 26th Mid-Atlantic Industrial & Hazardous Waste Conference, University of Delaware, July 1994.
88. Remediation of Soil Contaminated by 2-Chlorophenol and 2,4,6-Chlorophenol Using Supercritical Fluid Extraction, 26th Mid-Atlantic Industrial & Hazardous Waste Conference, University of Delaware, July 1994.
89. Electro-osmosis for In-situ Treatment of Chromium-Contaminated 26th Mid-Atlantic Industrial & Hazardous Waste Conference, University of Delaware, July 1994.
90. Oxidation of Atrazine and Its Intermediates by Fenton's' Reagent, 26th Mid-Atlantic Industrial & Hazardous Waste Conference, University of Delaware, July 1994.
91. Reduction of THMF Potential by Fenton's Reagent26th Mid-Atlantic Industrial & Hazardous Waste Conference, University of Delaware, July 1994.
92. Oxidation Kinetics and Mechanisms of 2,4-Chlorophenol by Fenton's Reagent26th Mid-Atlantic Industrial & Hazardous Waste Conference, University of Delaware, July 1994.
93. Gas-Phase Photocatalytic Destruction of Trichloroethlene (TEC) Using UV/TiO_2 26th Mid-Atlantic Industrial & Hazardous Waste Conference, University of Delaware, July 1994.
94. The Removal of Chrolophenols by Electrochemical Oxidation 26th Mid-Atlantic Industrial & Hazardous Waste Conference, University of Delaware, July 1994.
95. In-situ Removal of Phenols from Contaminated Soil by Electro-Osmosis Process, 27th Mid-Atlantic Industrial & Hazardous Waste Conference, Lehigh University, July 1995.
96. Transport of Hexachromium in Porous Media, 27th Mid-Atlantic Industrial & Hazardous Waste Conference, Lehigh University, July 1995.
97. Control of Heavy Metals in Drinking Water, 2nd International Workshop on Drinking Water Quality Management and Treatment Technology, Taipei, Taiwan, March 1995.
98. Overview of Eutrophication, 3rd International workshop on Drinking Water Quality Management and Treatment Technology, Taipei, Taiwan, March 1996.
99. *Cryptosporidium* in Drinking Water. 4th International Workshop on Drinking Water Quality Management and Control Technology, Taipei, Taiwan, March 1997.
100. Surface Physical-chemical Characteristics of Sludge Particulates, Workshop on Environmental Laboratories: Moving Towards the 21st Century. Water Environment Philadelphia, PA, March 1997.

101. Treatment of Sanitary Landfill Leachate by Fenton Oxidation: A Pilot Plant Study, 30th Mid-Atlantic Industrial Waste Conference, Villanova University, July 1998.
102. Removal of Sulfur from coal by Sonochemical Oxidation. 30th Mid-Atlantic Industrial Waste Conference, Villanova University, July 1998.
103. Issues and Control of *Cryptosporidium* in Drinking Water, 6th International Workshop on Drinking Water Management and Treatment Technologies, Ta-yeh University, Taipei, March, 2000.
104. Interactions of anthropogenic polymers and surfactants in the environment: Effects on contaminant mobility. ACS National Meeting 2000.
105. Heavy Metals Interactions with Sludge Particulate, National Taiwan University, International Water Association, Specialty Conference on Sludge Management, March, 2001.
106. Water Hardness: Engineering Issues. 7th International Workshop on Drinking Water Quality Management and Treatment Technologies, Tam-Kiang University, Taipei, March 2001.
107. In-situ Treatment of Soils by Ozonation, International Conference on AOP, Torondo, Canada, June, 2001.
108. Inactivation of *Cryptosporidium* by Sonochemical Process, International Conference on AOP, Toronto, Canada, June, 2001.
109. Size Ddependency of Nanocrystalline TiO_2 on its Optical Property and Photocatalytic Reactivity exemplified by 2-chlorophenol. National Meeting, American Chemical Society, San Diego, MAR 2005.
110. Preliminary Observations of Bacterial Responses to Photocatalytic Nano-TiO_2 Particles. National Meeting, American Chemical Society, San Diego, MAR 2005.
111. Effect of Photocatalytic TiO_2 on the Growth of Bacteria Exemplified by *E. coli*, Annual Meeting, Society of Environmental Chemistry and Toxicity, Baltimore, MD. October 2005.
112. Hydrogen Reduction of Perchlorate in Dilute Aqueous Solution, Partners in Environmental Technology Symposium and Workshop, Washington, DC, November 2005.
113. Sonochemical Treatment of Wastewater Effluents for the Removal of Pathogenic Protozos Exemplified by Cryptosporidium. The First International Conference on Sustainable Water Environment. Taipei, Taiwan Nov. 2-4, 2005.
114. Removal of Perchlorate by Activated Carbon Adsorption, Partners in Environmental Technology Symposium and Workshop, Washington, DC, November 2005.
115. Sonochemcal Process for the Removal of DBPS and Precursor in Water. The 2nd International Conference on Sustainable Water Environment. Taipei, Taiwan, Oct.30-Nov. 1, 2006.
116. Survival of Bacteria in the Presence of Photocatalytic Nano-TiO_2. International Conference on the Environmental Implications and Applications of Nano-sized Materials. Taichung, Taiwan, Dec. 14-15, 2006.
117. Comparison of Four Different Methods Investigated for Perchlorate Reduction; 2006 Gordon Research Conference, New Hampshire, June 2006.
118. The Effect of Particle Size on the Toxicity of Photocatalytic Nano-TiO_2 toward *E. coli*; 2006 Gordon Research Conference, New Hampshire, June 2006.
119. Functionalizing Activated Carbon for Perchlorate Removal; 2006 Gordon Research Conference, New Hampshire, June 2006.
120. Toxicity Effect of TiO_2 to *Selenastrum capricornutum:* Effect of Particle Size*;* 2006 Gordon Research Conference, New Hampshire, June 2006.
121. Effects of Nanoparticle Size and Concentration on *Ceriodaphnia dubia;* 2006 Gordon Research Conference, New Hampshire, June 2006.
122. The Adsorption of Tetracycline onto Nano-Aluminum Oxides and Its Degradation by Fenton Oxidation Process; 2006 Gordon Research Conference, New Hampshire, June 2006.
123. Preparation of TiO_2 Thin Film by Pulsed Laser Deposition (PLD) Process and the Determination of Photocatalytic Reactivity using Direct Photoelectrochemical Measurements; 2006 Gordon Research Conference, New Hampshire, June 2006.
124. Mono-metallic Nano-Catalysts for the Reduction of Perchlorate in Water; NSTI 2006 Nanotechnology Conference, Boston, MA, May 2006.
125. Short-term Chronic Toxicity of Photocatalytic TiO_2 to Aquatic Organisms; NSTI 2006 Nanotechnology Conference, Boston, MA, May 2006.
126. Removal of Perchlorate at Low Concentrations by Chemical Methods with Catalysts; Marriot Wardman Park Hotel, Washington DC; SERDP/ESTCR: Partners in the Environmental Technology Technical Symposium and Workshop; November 28 - 30, 2006.
127. Huang C.P and Mahmudov R.H.; Wardman Park Hotel, Washington DC, SERDP/ESTCR:Partners in the Environemental Technology Technical Symposium and Workshop; November 28 - 30, 2006.

128. On the Opportunities of Nano-technology in Environmental Applications: A Realty Assessment and Future Potential. International Conference on the Applications and Implications of Nanotechnology. National Chung Hsing University, June 2007.
129. Chemical Reduction of Perchlorate in Dilute Aqueous Solutions. The 3rd International Conference on sustainable Water Environment, Sapporo, Japan, Oct. 24-25, 2007.
130. Photocatalytic Performance of Pulsed Laser Deposited TiO_2 Thin Films - Effects of Oxygen Vacancy, Phase Composition, and Energy Band Configuration. 81st Colloidal & Surface Science Symposium, American Chemical Society Meeting (ACS), Newark, DE June 2007.
131. Hydrogen Reduction of Perchlorate in Dilute Aqueous Solutions. 81st Colloidal & Surface Science Symposium, American Chemical Society Meeting (ACS), Newark, DE June 2007.
132. Adsorption of Nano-sized TiO_2 Particles onto Surface of Algae exemplified by *Pseudokirchneriella subcapitata*. 81st Colloidal & Surface Science Symposium, American Chemical Society Meeting (ACS), Newark, DE June 2007.
133. Gas Phase Perchlorate Reduction by Mono- and Bimetallic Catalysts Supported on Activated Crbon. 81st Colloidal & Surface Science Symposium, American Chemical Society Meeting (ACS), Newark, DE June 2007.
134. Ozone/Ultrasound Oxidation of Single-walled Carbon Nanotubes (SCNTs) in Water. 81st Colloidal & Surface Science Symposium, American Chemical Society Meeting (ACS), Newark, DE June 2007.
135. N-doped TiO_2 Photoanode for Solar Water Splitting. Integrative Graduate Education and Research Traineeship (IGERT) National Planning Meeting, Arlington, VA, 2007.
136. Bandgap Reduction of Titanium Dioxide by TiN Oxidation for Solar Hydrogen Generation. Center of Catalytic Science and Technology (CCST), University of Delaware, Newark, DE, 2007.
137. Aqueous Phase Oxidation of Single-Walled Carbon NanoTubes (SCNTs). Delaware EPSCoR UD Seed Poster Conference. January 2007.
138. Removal of Perchlorate from Water by Functionalized Activated Carbon Adsorption. International Symposium on Sustainable Water and Soil Environment. Taichung, Taiwan, January 10-11, 2008.
139. Global warming and its Impacts on Water Environment. Chinese Academy of Science, Beijing, China, November 2008.
140. Sonochemical Processes for the Control of Emerging Contaminants. Nuclear Research Institute, Taiwan, 2008.
141. Remediation of Harbor Sediments for Reuse, Kaohsiung Harbor Administration, Taiwan, May 2008.
142. Separation and Reduction of Low Concentration of Perchlorate Ion in Water by Integrated Electrodialysis and Catalytic Electrochemical Reaction. (P. Y. Wang, S.I. Shah and C.P. Huang). Mid-Atlantic Regional Water Conference. September 24-25, 2014. Shepherdstown, West Virginia.
143. The electrochemical reduction of nitrate over micro-architectured metal electrodes with stainless steel scaffold. (Jenn fan Su, C. P. Huang) Mid-Atlantic Regional Water Conference. September 24-25, 2014. Shepherdstown, West Virginia.

TEACHING

A. Wayne State University (1971-1974)

Thermodynamics (Undergraduate Requirement)
Engineering System Analysis (Undergraduate Requirement)
Sanitary Chemistry (Graduate)
Sanitary Engineering Operation and Processes (Graduate)
Industrial Waste Treatment (Graduate)
Advanced Sanitary Engineering Laboratory (Graduate)
Stream Sanitation (Graduate)
Advanced Physical-Chemical Methods for Water and Wastewater (Graduate)

B. University of Delaware (1974- president)

Introduction to Civil Engineering (Freshman Requirement)
Introduction to Environmental Engineering (Undergraduate Requirement)
Water Supply Engineering (Undergraduate Elective)
Industrial Waste Management (Undergraduate Elective)
Industrial Ecology (Undergraduate Elective)
Hazardous Waste Management (Undergraduate Elective)

Senior Design (Undergraduate Requirement)
Physical Aspects of Environmental Engineering (Graduate)
Chemical Aspects of Environmental Engineering (Graduate)
Water Quality and Pollution Control (Graduate)
Advanced Environmental Chemistry (Graduate)
Environmental Remediation Engineering (Graduate)
Industrial Ecology, Science and Technology of Sustainability (Undergraduate elective)

TEACHING GRANT & AWARD

Nominee, Teacher of the year award, 1977, 1978, 2007.
Winter Session Program, Teaching Grant to develop a course on "Industrial Waste Management". 1982.

MASTERS THESIS SUPERVISED (63)

1976	Elliott, H. A.	The Effect of Naturally Occurring Particles on the Stability of Emulsified Oils
1976	Graham, W.S.	The Removal of Organic Matters from Dilute Aqueous Solution by Calcium Carbonate
1976	Ashmead, R. M	The Removal of Trace Metals from Sludge
1977	Ostovic, F.	The Removal of Cadmium(II) from Dilute Aqueous Solution
1977	Mulkey, E.	The Kinetics of Emulsification
1978	Quist, G.	The Dissolution of a Manganese Ore
1978	Jones, B. E.	The Kinetics of CdS(s) Oxidation by Oxygen
1978	Bowers, A. R.	The Treatment of Chromium(VI) Containing Wastewater by Activated Carbon Process
1979	Smith, E. H.	The Treatment of Cadmium Plating Wastewater by Activated Carbon Adsorption
1979	Kehrer, K. P.	The Effect of Suspended Particles on the Uptake of Organic Nitrogen
1980	Wittmer, S. C.	An Assessment of Polymer Conditioned Municipal Sludge Dewatering Characteristics
1980	Mongon, E.	The Removal of Cd(II) by Chemical Precipitation
1980	Wirth, P.	The Removal of Cd(II) from Cadmium Plating Wastewater by Adsorption Processes
1981	Wang, Y. T.	The Removal of Pb(II) from Dilute Aqueous Solutions
1982	Ferrell, D. P.	The Removal of Fine Coal Particles from Water by Floatation
1982	Rhoads, E. A.	The Removal of Zn(II) by Aluminosilicates as Affected by Complex Formation
1982	Boomhower, A.	The Treatment of Cadmium Plating Wastewater by Activated Carbon Process
1983	Fu, L. K. P.	The Removal of Arsenic(V) by Activated Carbon Process
1983	Liberati, M. R.	Heavy Metals Retention by Soil Components Affecting Selectivity
1983	Tsang, M. H.	The Removal of Co(II) from Water by Activated Carbon
1984	Baumgartner, R.	The Effect of Cd(II) and Its Complexes on the Growth Characteristics of Microorganisms
1984	Hsieh, Y.S.	Chemical Interaction on the Stability of Hydrous Solids
1984	Schulthess, C.	Adsorption Behavior of Ni(II) onto Clays and Its Related Minerals as Affected by Humic Acids

1985	Young, S. P.	Transport of Cadmium in Soils
1986	Tsang, C. M.	The Removal of Ni(II) from Water by Foam Separation
1986	Liu, B. W.	The Removal of Some Heavy Metals by Hydroxyapatite
1986	Johnson, G.	The Oxidation of Galena by Oxygen
1986	Davis, A. P.	Electrophotooxidation of Galena
1986	Dolan, S.	The Concurrent Removal of Toxic Heavy Metals and Organic Substances Activated Carbon
1987	Westman, D.	The Removal of Cd(II) by Fungi
1989	Quirk, K.	Fungal Reactors for the Treatment of Heavy Metal Containing Water and Wastewater
1989	Tasi, W. M.	A Computer Program for Equilibrium Aquatic Chemistry
1990	Weng, C. H.	The Removal of Heavy Metals by Fly Ash
1991	Chu, C. S.	Electrochemical Treatment of Toxic Organic Compounds
1992	Wang, H.W.	Reductive Removal of Nitrate from Water by Iron Reduction
1992	Ko, S.W.	Reactions Between Cr(VI) and Pyrite
1992	Giacomini, D.	Chemistry at the As_2S_3(s)-Water Interface
1992	White, A.	Chemistry at the ZnS(s)-Water Interfaces
1993	Flaherty. K.	Treatment of Sanitary Landfill Leachate by a Pilot Scale Fenton Process
1993	Terranova, N	Removal of Precursors and Disinfection By-products by Photocatalytic Oxidation
1993	Elk, M.	Mitigation and Assessment of Environmental Impacts on Wetlands due to Highway Constructions.
1993	Lin, Y.T.	REDOX Reactions between Chromium(VI) and Pyrite in Aqueous Solution
1993	Shug. E.	Environment Factors Affecting the Detection of VOC in the Soil
1994	Cheng, K.	Treatment of Dye Wastewater by Fenton Reagent
1995	Erich, R.	Removal of Chlorohydrocarbons from Soils by Supercritical CO_2 Extraction.
1995	Miodiouski, K.	Oxidation of Atrazine by Fenton' Reagent
1996	Huang, Y.C.	Removal of Organic Contaminants from Groundwater by Ultrasound
1996	Hsu, M.C.	Recovery of FE(II)-EDTA from Industrial Wastewater
1997	Alayian, M	Role of Fe^{2+} in Fenton Process
1997	Takiyama, L. R.	Removal of Chlorophenols and Surfactant from Groundwater by Electro-osmosis Process
1997	Cheng, Lewis	Removal of Mixed Wastes by Electro-osmosis Process
1999	Pirestani, D.	Rate and Equilibrium of Silver Uptake by Sludge Particulates
2002	Lin, H. Y.	Enhancing Sludge Digestion by Sonochemical Treatment
2002	Chen, Y. T.	Separation of Nano-sized Particles by Crossflow Electrical Filtration
2002	Yun, J.	Removal of Total Nitrogen from Water by Combined Fe-Reduction and Ion Exchange Process

2008	Chou, Hsuanwen	Toxicity of Nano-TiO_2 toward Daphnia
2008	Tsai, Jay	Removal of Selected Antibiotics from Water using AOPs
2008	Lin, M. Y.	Physical Chemical Interactions between Nano-particles and Algae
2011	Yeh, Yunda	Reduction of CO_2 by Electro-Photocatalytic Processes
2014	Shi Lu	PVDF-Graphene Conductive Composite Membrane and PVA-Graphene Conductive Composite Membrane Preparation and Application
	Yache Zhang	Nanoparticle Separation in Cross-flow Filtration by Introduction of Electrophoresis
	Xiesong Liu	Nano-magnetite Impregnated Dentrimer Particles for the Removal of Heavy Metals from Water
2015	Hao-Yun Lei	Mechanistic Aspect of Electrochemical Signal in a Microbial Fuel Cell-based Biosensor
2016	Arason Zhang	Removal of fluoride by membrane technology
2017	Shi Lu	Removal of perchlorate by membrane technology

DOCTORAL THESIS SUPERVISED (39)

1974	Wu, M. H.	The Removal of Chromium(VI) from Dilute Aqueous Solution President, Waste Minimization Corp. Taiwan
1979	Elliott, H. A.	The Adsorption of Cu(II) at the Solid-Solution Interface. Effect of Complex Formation. Professor and Director, Environmental Resource Engineering, Pennsylvania State University, College Park, PA
1982	Bowers, A. R.	Adsorption Characteristics of Various Heavy Metals and the Oxide-Solution Interface: Effect of Complex Formation Professor, Department of Civil & Environmental Engineering, Vanderbilt University, Nashville, TN
1983	Corapcioglu, O.	Adsorption Characteristics of Cu(II), Zn(II), Pb(II) and Ni(II) onto Activated Carbon Surface in Dilute Aqueous Solution. The Effect of Complex Formation. Director, State Environmental Laboratory, Texas Department of Environment. Gavelston, TX
1984	Kehrer, K. P.	Specific Chemical Interactions Affecting the Stability and the Dewaterability of Colloidal Aluminum Oxide. Senior Manager, Armstrong Industry, Inc., Lancaster, PA
1987	Park, S.W	The Chemistry of CdS(s)-Electrolyte Interface. Dean, College of Environment, Kaiming University, Taegu, South Korea
1987	Tien, C. T.	Chemical Reactions Between Some Heavy Metal Ions and Sludge Particulate. Division Chief, Division of Groundwater Discharge Permit Division, Maryland Department of Environment, Baltimore, MD
1987	Hsieh, Y. S.	The Mechanism of Photooxidation of CdS(s).

		Professor, Department of Environmental Engineering, National Chung Hsing University Chairman, Board of Director, Industrial Manufacturing Foundation, Taipei, Taiwan
1989	Davis, A. P.	Photocatalytic Oxidation Reactions at the Cadmium sulfide/Water Interface. Professor, Department of Civil Engineering and Director, Water Resource Center, University of Maryland, University Park, MD
1990	Liu, J. C.	The Chemistry of CuS(s)-Electrolyte Interface. Professor & Chairman, Department of Chemical Engineering, National Taiwan Institute of Technology, Taipei, Taiwan
1990	Huang, C. P	Adsorption Characteristics of Various Heavy Metals on Fungal Surface. Professor, Graduate Institute of Environmental Engineering, National Chao Tung University, Shin-chu, Taiwan Vice President, Taiwan United University, Hsin Chu Taiwan
1991	Tsang, J. M.	The Photooxidation of Some Organic Chemicals by TiO_2. Senior Project Engineer, Formosa Plastic Company, Beaton Rouge, LA
1993	Tang, W. Z.	The Removal of Chlorinated Phenols by Photocatalytic Oxidation in the Presence of Hydrogen Peroxide. Professor, Department of Civil Engineering, Florida International University, Miami, FL
1993	Dong, C. D.	Mechanisms of Photocatalytic Oxidation of Chlorohydrocarbons. Professor, Department of Ocean Environmental Engineering, National Kaoshiung Institute of Ocean Technology, Kaohsiung, Taiwan
1994	Weng, C. H.	Transport and Transformation Mechanisms of Chromium(VI) in New Jersey Soils. Professor & Head, Department of Ecological Engineering, Yi-So University, Kaohsiung, Taiwan
1995	Shin, H. M.	In-situ Treatment of TEL Contaminated Soil. Professor, Department of Environmental Engineering, Kaijung University, Pu-Shan, Korea
1995	Chu, C. S.	Electrochemical Oxidation of Surfactants. Chief Operation Officer, Young-Kuang Chemical Company, Taipei, Taiwan
1995	Takiyama, M.	Enhancing the Photocatalytic Efficiency by Surface Modification of TiO_2. Professor, Department of Environmental Chemistry; Dean of Graduate School, State University of St. Paul. Brazil
1996	McIntosh, K.	Removal of Chromium by Electrokinetic Process Senior Engineer, Geomatrix Consultants, New York
1997	Wang, J. M.	Equilibrium Uptake of Heavy Metals by Sludge Particulates. Associate Professor, Department of Civil Engineering, Missouri University of Science and Technology, Rolla, MO
1998	Takiyama, L.	Rate of Heavy Metal Uptake by Sludge Particulates Director, Policy Department, Environmental Protection Agency, the Government of Brazil
1999	Chiou, H. J.	Treatment of Sanitary Landfill Lechate by Fenton Oxidation Process Director, Policy Coordination Division. Ministry of Environment. South Korea

2000	Kim, I. L.	Sonochemical Oxidation of Polyaromatic Sulfur Compounds in Aqueous Solution Professor & Chairman, Department of Environmental Engineering, College of Environmental and Marine Sciences Technologies, Pukyong National University, Busan, Korea, 608-737, Korea
2000	Chang, J. H.	Removal of Selected Nonionic Organic Compounds from Soils by Electrokinetic Process Professor; Department of Environmental Management, Chao Young University, Taiwan
2001	Myoda, S. P.	Treatment of Secondary Effluents for the Removal of Residual BOD and the Inactivation of Cryptosporidium. Vice President, Institute of Environmental Health Laboratories & Consulting Group, Lake Forest Park, WA 98155
2001	Qiang, Z. M.	Electro-Fenton Oxidation Process for the Degradation of Polyaromatic Hydrocarbons Professor, Center of Eco-Environmental Sciences, Chinese Academy of Science, Beijing, China
2002	Sung, M. H.	In-situ Treatment of Contaminated Soils by Ozonation Associate Professor, Department of Environmental Engineering, Tung Hai University, Taichung, Taiwan
2002	Hamideh, S.	Removal of Phosphate from Aqueous solutions by Unconventional Adsorbents Associate Professor, Ruhr University–Bochum, Bochum, Germany
2003	Poesponegro, I	Chemical Interactions between Heavy metals and Aerobically Digested Sludge Particulates Self-employee
2003	Poesponegro, H.	Chemical Interactions between Heavy Metals and Anaerobically Digested Sludge Particulates. Self-employee
2004	Lin, Y. T.	Partitioning of Lead in Groundwater by Nanosized Particulates Associate Professor, Department of Soil and Environmental Sciences, National Chung-Hsing University, Tai-Chung, Taiwan
2007	Muhmadov, R.	Removal of Perchlorate by Integrated Activated Carbon Adsorption and Catalytic Reduction Engineer, Air Lique, Newark, DE
2007	Wang, D. M.	Catalytic Reduction of Perchlorate using Monometallic Nano-catalysts Research Associate, Department of Civil and Environmental Engineering, Missouri University of Science and Technology
2008	Lin, H. Y.	Effects of Doping and Particle Size on the Phtocatalytic Reactivity of TiO_2 Catalyst. EPI Engineer, Intel Company, Seattle, WA
2008	Erdem, A.	Toxicity of TiO_2 Nano-photocatalyst toward Bacteria Exemplified by *E. coli.* Associate Professor, Akdeniz University, Antalya, Turkey
2009	Metzler, D.	Toxicity of TiO_2 Nano-photocatalyst to Algae and Algal Assemblies. Assistant Professor, Delaware State University

2009	Li, Minhua	Chemical Transformation of Carbon Nanotubes and Its Effects on the Adsorption Characteristics toward Selected Chemical Species of Importance to the Environment. Engineer, Nalco Co. Chicago, IL
2015	Po Yen Wang	Functionalized Membranes for the Permselective Separation of Perchlorate and the Catalytic Electrochemical Reduction of Perchlorate to Chloride Under Ambient Conditions Assistant Professor, Department of Civil Engineering, Weidner University, Philadelphia, PA
2016	Jenn Fang Su	Catalytic Electrochemical Reduction of Nitrate in Dilute Aqueous Solutions toward High Nitrogen Selectivity, Assistant Professor, Department of Chemical andMaterial Engineering, Tamkang University, Taipei, Taiwan
2018	Ruimei Fang	Adsorption Characteristics of Ammonium and Phosphate onto Hydrous Biochar Research Associate, University of Delaware, Newark, DE
2018	Ching Lung Chen	Functionalized adsorbent and catalyst for the removal of oxyanions exemplified by fluoride and perchlorate. Industrial Technology Research Institute, Hsin Chu, Taiwan

POST-DOCTORAL RESEARCH SUPERVISED (14)

1976 - 1978	Ho, A.	The Adsorption of Dissolved Organic Nitrogen onto Calcite Self Employed
1979 - 1980	Lin, Y.T.	The Adsorption of Co(II) onto Hydrous Solids Self Employed
1986 - 1989	Tokunaka, S.	The Photooxidation of Mercury Sulfides Visiting Scientist, Department of Energy and Environment, Keimyung University, Korea
1991 - 1992	Fu, Guanmin	Electrochemical Processes for the Removal of Organic Compounds Research Associate, University of Houston
1999 – 2000	Harry Zhang	Treatment Sanitary Landfill Leachate by Fenton Process Professor, Department of Environmental Science, Wu Han University, China
1999 – 2000	Y. H. Weng	Electrically Assisted Cross-Flow Filtration for the Separation of Nano-sized Particles Research Associate, Refinery and Manufacturing Research Center, Chinese Petroleum Co. Chia Yi, Taiwan
2008-2009	Allie Liao	Synthesis of TiO2 Photocatalyst using Revers Phase Technique Research Associate, Resource Recovery Foundation, Taipei, Taiwan
2010 – 2011	W. P. Hsieh	Fate and Transport of PPCPs at the Solid-Liquid Interface Research Associate, Water Resource Center, National Chao tong University, Hsinchu, Taiwan
2010 – 2011	Ben Peng	Reduction of Carbon dioxide by Photocatalytic Thinfilms Associate Professor, Department of Environmental Engineering and Science, Tong Hai University, Taiwan
2012 -2013	Yu-Chi Lee.	Degradation of perfluorooctanoic acid using catalytic electrochemical oxidation proses.

		Visiting Scientist, Graduate Institute of Environmental Engineering, National Taiwan University, Taiwan
2012 - 2013	Y Choi	Separation of nano-sized particles using electrophoretic filtration technique Visiting Scientist, Department of Environmental Engineering Seoul University, South Korea
2013 - 2014	Y. J. Shih	Formation of Chlorine at the Metal-dopped Carbon Electrodes National Cheng Kung University, Taiwan
2013 - 2014	Chia Chi, Su	Disinfection of *E. coli* using Electrochemically Generated Chlorine Chia-Nan University of Pharmacology and Technology, Taiwan
2015 - 2016	Han Yu Chiu	Synthesis and Testing Perchlorate-permselective Membrane National Sun-yet Sen University

UNDERGRADUATE HONOR SENIOR THESIS SUPERVISION

1987 Vane, L.
The Enhanced Removal of Arsenate by Fe(II)-treated Activated Carbon
(Chemical Engineering)

1989 Su, H.J.
The Removal of Heavy Metals from Water by Crab Shell Biosorbent, (Civil Engineering)

1990 Felton, J.
The Development of Streaming Potential Detector for the Measurement of Zeta Potential of Aquosols
(Chemistry)

2004 Brian Marieta
Determining the Sludge Dewaterability Using Automatic Filtration Device.
(Environmental Engineering)

2005 Patrick Lorem
Development of Nano-cement
Cornell University, NSF-Research Experience for Undergraduate Program

2011 Gregory Lavenburg
Effect of Bird Droppings on the Corrosion of Highway Structure

2011 Eric McGreny
Climate Change on the Solubility of Minerals

SERVICE (University of Delaware)

A. Off-Campus

1982-1986	Associate Editor, Journal of Environmental Engineering, American Society of Civil Engineers.
1986-1990	Editor-in-Chief, Journal of Environmental Engineering, American Society of Civil Engineers.
1990 - 1995	Advisory Committee, Center of Pollution Control Technology, Industrial Technology Research Institute, Taiwan.
1990 - 1995	Advisory Member, Pollution Control Research Center, Industrial Technology Research Institute, Taiwan.
1990 - 1991	Member, Publication Committee, Program Committee, Chinese Society of Environmental Engineering, Taiwan.
1990 -	Panelist, National Science Council, Government of the Republic of China.
1990 -	Panelist, Research Proposal Review, Administration of International Development.
1994 -	Panelist, Research Proposal Review, Exploratory Research Program, Environmental Protection Agency.
1993 -	Editorial Board, Journal of Chinese Society of Environmental Engineering, Taiwan.
1993	Editorial Board, Industrial Park News, Taiwan.

1993 -	Editorial Board, Pollution Prevention for Sustainable Development, Taiwan.
1994 -	Panelist, Research Proposal Review, Exploratory Research Program, Environmental Protection Agency.
1996	External Reviewer, Ph.D. Program, Department of Civil & Environmental Engineering, New Jersey Institute of Technology, Newark, NJ.
1996	Chair, Review Committee, Graduate Institute of Environmental Engineering, National Taiwan University.
1998	Program Review Committee, Department of Environmental Engineering, National Central University, Tao Yung Taiwan.
1999 -	Advisory Committee, Department of Civil and Environmental Engineering, Lehigh University.
1999	Review Committee, Department of Nuclear Sciences, National Ching Hua University, Shin Chu, Taiwan.
2000-	Editorial Board, International Journal of Applied Science and Engineering
2001- 2005	Research Committee, Water Environment Federation
2004	American Water Works Association, Chesapeake Section, Research Committee
2003 -2006	Editor, International Journal of Applied Science and Engineering, Chaoyang University of Technology
2003 - 2006	Advisory Committee, Center of Environmental Health and Safety Technology, Industrial Technology Research Institute, Taiwan.
2004-2007	American Water Works Association, Chesapeake Section, Research Committee
2005- Present	Associate Editor, Practice Periodical of Hazardous, Toxic, and Radioactive Waste Management, ACCE
2005-2006	Editorial Board, Chinese Institute of Environmental Engineering
2006-	Literature Review Committee, Water Environment Federation
2006-	Chair, Advisory Committee, Center for the Study of Natural Hazards and Environment, National Chung Hsing University, Taichung, Taiwan
2006-present	Editorial Board, Frontiers of Environmental Engineering,
2006-2010	Associate Editor, Science of the Total Environment
2007-	Editorial Board, Frontier of Environmental Engineering and Science
2007-2010	Editorial Board, Environmental Engineering, Chinese Academy of Sciences
2008-2012	Associate Editor, Science of the Total Environment
2008-	Member, President's Committee on University Affairs, National Chung Hsing University, Taichung, Taiwan
2008	Director, International Corporation Department, Environmental Pollution Control Key Program, He-Nan Province, China
2010-	Member, Advisory Committee, Graduate Institute of Environmental Engineering, National Taiwan University, Taiwan
2010-	Member, Advisor Committee, College of Atomic Science, National Ching Hua University, Taiwan
2011-	International Advisory Committee, Center of Excellence in Environmental Science, King Abdulaziz University, Saudi Arabia
2011-present	Editorial Board, Journal of Environmental Protection, Science Research Publishing
2012	International Advisory Council, Chair, Center of Disaster Prevention and Environmental Engineering, National Taiwan University, Hsin Chu, Taiwan
2013-2015	Advisor, University Affairs, National Chung Hsing University
2013-	Responsible Editor, Frontier of Environmental Engineering and Science
2013	Overseas Expert, Chinese Academy of Sciences
2014-2015	Editorial Board, Journal of Agriculture and Forestry, National Chung Hsing University

B. University

1980 - 1984	Title XII Advisory Committee
1981 - 1983	Research Committee
1984 -	Safety and Radiation Committee
1984 - 1989	Promotion and Tenure Committee

1985 - 1988	Faculty Grievances Ad Hoc Committee
1993 - 1994	Faculty Honor Committee
2003- 2008	Tenure and Promotion Committee
2000 -	Advisory Committee, Institute of Soil and Environmental Quality
2007	Ad Hoc Committee on Investigation
2007-2008	College of Engineering Dean Search Committee
2009-	Delaware Environment Institute: Council member

C. College of Engineering

1984 - 1985	Chairman, Promotion and Tenure Committee
1978 - 1979	Secretary, Faculty of Engineering
1984	Departmental Representative, College Goals Conference
1987	Departmental Representative, College Goals Conference
1994	Life-Long Education Committee
1993 -1994	Environmental Initiative Program
1999 - 2000	Chair, Search Committee, Chair of the Department of Electrical and Computer Engineering
2006-2007	Dean Search Committee, College of Engineering

D. Department of Civil Engineering

1996 – 2001	Chairman, Department of Civil and Environmental Engineering
1984 - 1985	Chairman, Promotion and Tenure Committee, 1984 - 1985
1983 - 1984	Chairman, Graduate Committee, 1983 - 1984
1983 - 1984	Chairman, Faculty Search Committee
1988 - 1989	Chairman, Faculty Search Committee
1992 - 1994	Chairman, Faculty Search Committee
1985 – 1995	Chairman, Safety Committee
1983 - 1985	Chairman, Building Renovation Committee
1986	Chairman, Undergraduate Laboratory Committee
1984	Member, Chairman Advisory Committee
1994 - 1996	Member, Graduate Committee

E. CONFERENCE ORGANIZATION

1984	Chairman, 13th Mid-Atlantic Industrial Waste Conference
1986	Chair, Environmental Protection Section, Modern Engineering Technology Seminar, Chinese Institute of Engineering, Taipei, Taiwan
1987	Chairman, Workshop on Heavy Metals in the Environment: National Chung Hsing University, Taichung, Taiwan
	Co-Chair, Activated Carbon Technology, Fine Particle Society Annual Meeting, Boston, MA.
	Section Chairman, 7th International Conference on Heavy Metals in the Environment, Geneva, Switzerland
	Co-Chairman, Symposium on Adsorption of Pollutants from Water and Wastewater, Fine Particle Society National Meeting, San Diego, CA.
	Co-Chairman, Symposium on Novel Separation and Destruction of Hazardous Pollutants from the Liquid Phase Using Physical and Chemical Techniques, Forth World Congress of Chemical Engineers, Karlsruhe, Germany
	Co-Chairman, Symposium on Advanced Oxidation Processes, AICHE Summer Meeting, Pittsburgh, PA.
	Co-Chairman, Symposium on Advanced Oxidation Processes, AICHE National Meeting, San Francisco, CA.
	Co-Chairman, Aquatic Chemistry Symposium, American Chemical Society, San Francisco, CA.
	Co-Chairman, Total Treatment of Soils, American Institute of Chemical Engineering, Minnesota, MN.
	Chairman, Mainland-Taiwan Environmental Protection Symposium, Shanghai, China

	Co-Chairman, Adsorption Processes for Environmental Control, 23rd Fine Particle Society Meeting, Las Vegas, NV.
1993	Co-Chairman, Physical-chemical Processes for the Treatment of Industrial Waste, AICHE, Summer Meeting, Seattle, WA.
1994	Chairman, Liquid Phase Processes, AICHE, Summer Meeting, Denver, CO.
1994	Chairman, 26th Mid-Atlantic Industrial and Hazardous Waste Conference, Newark, DE
1995	Co-Organizer, 1st International Workshop on Drinking Water Quality Management and Treatment Technology, Taipei, Taiwan
1996	Co-Organizer, 2nd International Workshop on Drinking Water Quality Management and Treatment Technology, Taipei, Taiwan
1997	Co-Organizer, 3rd International Workshop on Drinking Water Quality Management and Treatment Technology, Taipei, Taiwan.
1998	Co-Organizer, 4th International Workshop on Drinking Water Quality Management and Treatment Technology, Taipei, Taiwan
1999	Co-Organizer, 5th International Workshop on Drinking Water Quality Management and Treatment Technology, Taipei, Taiwan
2000	Co-Organizer, 6th International Workshop on Drinking Water Quality Management and Treatment Technology, Taipei, Taiwan
2001	Co-Organizer, 7th International Workshop on Drinking Water Quality Management and Treatment Technology, Taipei, Taiwan
2002	Co-Organizer, 8th International Workshop on Drinking Water Quality Management and Treatment Technology, Taipei, Taiwan
2003	Co-Organizer, 9th International Workshop on Drinking Water Quality Management and Treatment Technology, Taipei, Taiwan
2004	Co-Organizer, 10th International Workshop on Drinking Water Quality Management and Treatment Technology, Taipei, Taiwan
2005	Co-Organizer, First International Conference on Sustainable Water Environment. Taipei, Taiwan
2006	Co-Organizer, Second International Conference on Sustainable Water Environment. Taipei, Taiwan
2007	Chair, International Conference on the Environmental Applications and Implications of Nanotechnology, National Chung Hsing University, Taiwan
2008	Organizer, International Conference on Sustainable Water and Soil Environment, National Chung Hsing University, Taiwan.
2009	Co-Organizer, International Conference on Integrated Watershed Management, National Taiwan University
2010	Organizer, Conference on the Applications and Implications of Agro-nanotechnology, National Chung Hsing University
2010	Organizer and Chair, the Sixth International Conference on Sustainable Water Environment, University of Delaware.
2011	Co-Organizer, the 7th International Conference on Sustainable Water Environment, National Taiwan University, Taipei, Taiwan
2012	Honorary Chair, the 8th International Conference on Sustainable Water Environment, Guilin, China
2016	American Chemical Society, Symposium on Surface Chemistry of Biochar and its Application, Division of Environmental Chemistry, National Meeting, Washington DC
2017	American Chemical Society, Symposium on Crystal Facet and Defects on the Reactivity and Selectivity of Chemical Reaction. Division of Environmental Chemistry, National Meeting, Philadelphia, PA
2018	American Chemical Society, Symposium on Specific Chemical Reactions at the Solid-Water Interfaces, Division of Environmental Chemistry, National Meeting, Boston, MA
2019	American Chemical Society, Chemical Reactions toward Sustainable Water System. Division of Environmental Chemistry, National Meeting, San Diego, CA

INTERNATIONAL VISITING SCHOLARS/COLABORATORS

Dr. Gur Prasad, Department of Applied Chemistry, Banadrus Hindu University, India, 1983

Dr. Islam Hag, India Environmental Protection Agency, India, 1986

Dr. H. H. Yeh, Department of Environmental Engineering, National Cheng Kung University, Taiwan, 1986-1987

Mr. Park Soek Lee, Pohang Iron and Steel Company, Korea, 1992-1993.

Dr. Wilson, Jardim, State University of Campinus, San Poulo, Brazil, 1993 -1994

Dr. Sonia Maria Nobre Gimenez, State University of Campanius, San Poulo, Brazil, 1994

Prof. P. C. Chiang, National Taiwan University, Taipei, Taiwan, 1996-1997

Prof. S. F. Kang, Tam Kiang University, Taipei, Taiwan, 1998

Prof. Yu Chun Chiang, Yun Tze University, Taoyuan, Taiwan, 1998

Prof. Hung Lung Chiang, Fu Ying Pharmaceutical College, Tainan, Taiwan, 1999

Prof. David Dong, National Kaohsiung Marine Technology, Kaohsiung, Taiwan, 2000

Mr. J. J. Cheng, Taiwan Provincial Environmental Protection Bureau, Taichung, Taiwan, 1999

Prof. Ya-Wen Ko, Ta-Yeh University, Changhua, Taiwan, 2000

Prof. O. J. Jung, Chou San University, Korea, 2000-2001

Dr. Mohamad Barak, Central Research Institute, Egypt, 2000-2001

Prof. M. C. Lu, Fu-Ying Medical College, Tainan, Taiwan, 2001-2001

Dr. Daphne Hermosilla, Universidad Politécnica de Madrid Ciudad Universitaria (Pre-doctoral Student), 2003-2004

Prof. Chih-pin Huang, National Chao-tong University, Taiwan, 2004

Dr. Albert Weng, National Taiwan University, Taiwan (Pre-doctoral student), 2004

Prof. R. A. Doong, National Ching Hua University, Hsin-chu, Taiwan, 2005

Ms. Allie Liao, National Sen-yet Sun University, Taiwan (Pre-doctoral Student), 2005

Dr. Yao-hsiang, Tseng, Industrial Technology Research Institute, Taiwan, 2005

Professor Yunyao Li, Department of Chemical Engineering, National Chung Cheng University, Taiwan 2005

Prof. Rueyann Doong, Department of Environmental Science and Medicine, National Shin-Hua University, 2006

Prof. Ka-san Yu, Department of Environmental engineering, National Pusan University, Korea, 2007.

Prof. Amy Chang, Hung Guang, Department of Environmental Engineering, University, Taiwan, 2008.

Dr. Zhou Bin, Research Center for Eco-environmental Science, Chinese Academy of Science (Pre-doctoral student), 2008-2009.

Prof. J.C. Liu, Department of Chemical Engineering, National Taiwan University of Science and Technology, Taiwan, 2009.

Prof. Animes Golder, Department of Chemical Engineering, India Institute of Technology, India, 2011-2012

Prof. Sheng Li Zhang, School of Geosciences and Environmental Engineering Southwest Jiaotong University, Sichuan, China, 2013-2014.

Prof. Deming Deng, Department of Environmental engineering, School of Resource and Environmental Science, Wuhan University, Wuhan, P.R. China, 2013-2014

Prof. Hui Juan Lu, School of Environmental Science and Engineering, Quilin University of Science and Technology, Quilin, Yunlin, China, 2013-2014.

Prof. Shuh Cheng Yang, School of Environmental Engineering and Science, Xi-an Jiaotong University, Xi An, China, 2013-014.

Prof. Hong ji Wang, School of Environmental Engineering, Beijing University of Forestry, Beijing, China, 2015-2016

Prof. Hui Juan Liu, Research Center of Eco-Environmental Science, Chinese Academy of Science, Beijing, China

Chin-Pao Huang
University of Delaware

Citation indices	All	Since 2014
Citations	22778	8612
h-index	78	48
i10-index	258	178