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Google Scholar: <https://scholar.google.com/citations?user=vd8AI5wAAAAJ>

Education

Postdoc, Rice University, 1998-2000

Ph D, Louisiana State University, 1997, Environmental Engineering

MS, Zhejiang University, 1986, Environmental Chemistry

BS, Zhejiang University, 1983, Environmental Science

Academic Positions

Professor (2009 - Present)./ Program Chair (2005 - 2018), University of Houston-Clear Lake, Houston.

Associate Professor, University of Houston-Clear Lake, Houston. (2005 - 2009).

Assistant Professor, University of Houston-Clear Lake, Houston, Texas. (2000 - 2005).

Postdoctoral Research Fellow, Rice University, Houston, Texas. (1998 - 2000).

Postdoctoral Research Fellow, Hazardous Waste Research Center (HWRC), Louisiana State University, Baton Rouge, Louisiana. (1997 - 1998).

Licensures and Certifications

Registered Professional Engineer (Environmental Engineer), State of Louisiana. (2008 - Present).

Waste Site Management – HAZWOPER Training, Louisiana State University. (1995 - Present).

Academic Awards and Honors

Jesse A. Dorrington Engineering Grand Award (Faculty Advisor), CCISD. (2023).

Special Award by the American Institute of Chemical Engineers (AIChE) (Faculty Advisor), American Institute of Chemical Engineers (AIChE). (February 2023).

Advisory Board on the Scientific Committee (2015 - 2025), 5th, 6th, 7th, 8th, 9th, 10th, 11th, 12th International Conference on Environmental Pollution and Remediation (ICEPR).

Advisory Board, National Key Lab at the College of Environment and Resources, Zhejiang University, 2018 - 2023, Zhejiang University.

2020 Outstanding Reviewer for the Journal of Environmental Engineering, American Society of Civil Engineers.

Future Engineer Special Award for the exceptional projects demonstrating the principles and practices of engineering (Faculty Advisor), Texas Board of Professional Engineers. (2018).

Texas Stockholm Junior Water Prize (SJWP) state winner – 1st place (Faculty Advisor), The Water Environment Association of Texas. (2018).

First Place Poster Award (Faculty Advisor), The 9th International Conf. on Environmental Science & Technology, The American Academy of Science. (July 2018).

Excellence in Reviewing Award - Top 25 Reviewers, Water, Air & Soil Pollution journal. (2016).

Editorial Board, The Scientific World Journal, 2011 – 2013.

Editorial Board, Society of Environmental Toxicology and Chemistry, 2006 – 2008.

Editorial Board, Water, Air, and Soil Pollution journal, 2010 – Present.

Keynote Speaker, 36th International Symposium on Environmental and Analytical Chemistry, Rome, Italy. (October 9, 2010).

First Place Poster Award (Faculty Advisor), The 9th International Conf. on Environmental Science & Technology, The American Academy of Science. (July 2018).

President's Distinguished Research Award, University of Houston-Clear Lake. (April 2013).

University Faculty Fellowship, University of Houston-Clear Lake. (2011).

20 Years Service Award (2000 - 2020), University of Houston-Clear Lake.

Advisory Board, 2006 - Present, Environmental Institute of Houston (EIH).

Si Yuan Chair Professor, Zhejiang University, 2012 - 2018, Zhejiang University.

Adjunct Professor, Zhejiang University, 2011 - 2012, Zhejiang University.

Madison Who's Who of Professionals, 2004-2005, 2006-2007, Madison Who's Who of Professionals.

International Who's Who of Professional Educators, 2003-2004, International Who's Who of Professional Educators.

Marquis Who's Who in American, 57th Edition, 2003, Marquis Who's Who in American.

Outstanding Dissertation in the Field of Engineering and Physical Sciences, The Universities Council on Water Resources (UCOWR), Inc. (1997).

John Lee Pratt Fellowship, 1991, 1992, 1993, Virginia Tech. (1992).

Excellent Paper Award, Zhejiang Science and Technology Association. (1989).

Excellent Paper Award, Zhejiang Environmental Science Association. (1987).

TEACHING

Teaching Experience

University of Houston-Clear Lake

CHEM 3333, Environmental Chemistry
CHEM 4355, Environmental Sampling & Monitoring
CHEM 4356, Soil & Groundwater Remediation
CHEM 4535, Environmental Sampling & Monitoring
CHEM 4536, Environ Remediation & Biotech
CHEM 4839, Independent Study in Chemistry
CHEM 5535, Samp & Analysis of Environ Contaminants
CHEM 5536, Environmental Remediation
CHEM 5631, Environmental Chemodynamics
CHEM 5931, Research Topics Chemistry
CHEM 6939, Master's Thesis Research
ENSC 3332, Environ Chemistry
ENSC 4189, Independent Study in ENSC
ENSC 4331, Intro to Environ Engineering
ENSC 4344, Air Qual & Poll Control
ENSC 4355, Env Sampling & Monitoring
ENSC 4356, Soil & Groundwater Remediation
ENSC 4379, Internship in Environmental Sci
ENSC 4389, Independent Study in ENSC, 10 courses.
ENSC 4391, Topics in Environmental Science
ENSC 5333, Fundamentals of Environ Eng, 8 courses.
ENSC 5530, Research Methods: Environ Sci
ENSC 5535, Sampling and Analysis of Environmental Contaminants
ENSC 5536, Environmental Remediation
ENSC 5931, Topics in Environmental Sci
ENSC 5939, Independent Study in Environ Science
ENSC 6731, Graduate Seminar
ENSC 6838, Research Project and Seminar
ENSC 6939, Master's Thesis Environ Sci
GEOL 4356, Soil & Groundwater Remediation
INDH 5530, Research Methods
INDH 6838, Research Project

Guest Lecture (Non-Credit Instruction)

Guest Lecture, Future Science Group, London, UK (July, 2013).

Guest Lecture, Zhejiang University, (April, 2013).

Guest Lecture, The University of Texas Health Science Center at Houston (March, 2009).

Guest Lecture, Texas Tech University, Lubbock, TX (June, 2002).

Teaching-Related Awards / Honors (including student advisees' awards)

Exceptional Leadership and Commitment in Teaching Environmental Science, Texas Commission on Environmental Quality (TCEQ). (2004).

Piper Award Nominee / Piper Award Semi Finalist, University of Houston-Clear Lake. (2011/2025).

Jesse A. Dorrington Engineering Grand Award (Faculty Advisor), CCISD. (2023).

Special Award by the American Institute of Chemical Engineers (AIChE) (Faculty Advisor), American Institute of Chemical Engineers (AIChE). (February 2023).

Future Engineer Special Award for the exceptional projects demonstrating the principles and practices of engineering (Faculty Advisor), Texas Board of Professional Engineers. (2018).

Texas Stockholm Junior Water Prize (SJWP) state winner – 1st place (Faculty Advisor), The Water Environment Association of Texas. (2018).

First Place Poster Award (Faculty Advisor), The 9th International Conf. on Environmental Science & Technology, The American Academy of Science. (July 2018).

Teaching-Related Grants (Instrument Grant, STEM education, student training, a total of \$1.4 millions)

Zhang, C. (Supporting Senior), "MRI: Acquisition of a Matrix-Assisted Laser Desorption/Ionization Time-of-Flight System for High-Throughput Microbial Identification," Sponsored by National Science Foundation, Federal, \$349,959.00. (2023 - 2025).

Zhang, C., "Concentrations and risks of glyphosate, glufosinate, and their degradation products in water determined by ion chromatography/mass spectrometry," Sponsored by Faculty Development Fund (FDF), University of Houston Clear Lake, \$2,000.00. (2019).

Puzdrowski, R. L., Garrison, D., Howard, C. L., Lu, J. Y., Zhang, C., "S-STEM grant," Sponsored by National Science Foundation, \$592,468.00. (2013 - 2017).

Wang, Z., Zhang, C., Santiago-Vazquez, L. Z., "Acquisition of an LC/MS (ESI-TOF) for Interdisciplinary Research and Training at University of Houston-Clear Lake," Sponsored by National Science Foundation, \$245,527.00. (September 1, 2010 - August 31, 2013).

Janes, S., Rohde, L. H., Zhang, C., "The Bay Area Houston Partnership for Innovation in Biotechnology and Life Sciences," Sponsored by National Science Foundation, \$144,227.00. (2007 - 2010).

Zhang, C., "Teaching Environmental Science," Sponsored by Texas Commission on Environmental Quality (TCEQ), \$95,505.00. (2003 - 2007).

Teaching-Related Publications

Textbooks

Zhang, C. (2024). *Fundamentals of Environmental Sampling and Analysis, Second Edition*. John Wiley & Sons, Inc., pp. 576 (<https://www.wiley.com/en-us/Fundamentals+of+Environmental+Sampling+and+Analysis%2C+2nd+Edition-p-9781119778561>)

***This textbook is translated into Chinese and published in 2026.

Zhang, C. (2019). *Soil and Groundwater Remediation: Fundamentals, Practices and Sustainability* (pp. 512). John Wiley & Sons, Inc, pp. 512. (<https://www.wiley.com/en-bq/Soil+and+Groundwater+Remediation:+Fundamentals,+Practices,+and+Sustainability-p-9781119393153>)

***This textbook has also been translated and published in Chinese by China Science Press in November 2023. (<https://www.ecsponline.com/goods.php?id=223414>)

Zhang, C. (2007). *Fundamentals of Environmental Sampling and Analysis*. First Edition, John Wiley & Sons, Inc., pp. 436 (<https://onlinelibrary.wiley.com/doi/book/10.1002/0470120681>)

***This textbook also includes 15 lab experiments related to environmental sampling and analysis.

Teaching-Related Book Chapters

Zhang, C. (2015). In K. Vaidya (Ed.), *Chapter 8: Graduate Studies to Explore Opportunities in Environmental Sciences*. Environmental Science and Studies for the Curious, Curious Academic Publishing.

Textbook Solution Manuals

Zhang, C. (2024). Solution Manual for *Fundamentals of Environmental Sampling and Analysis, Second Edition*. John Wiley & Sons, Inc., pp. 198

Zhang, C. (2019). Solution Manual for *Soil and Groundwater Remediation: Fundamentals, Practices and Sustainability*, John Wiley & Sons, Inc., pp.171.

Zhang, C. (2007). Solution Manual (Chapter 1-12): *Fundamentals of Environmental Sampling and Analysis, First Edition*. John Wiley & Sons, Inc., pp. 139

Zhang, C. (2007). Solution Manual (Laboratory Experiments 1 to 15): *Fundamentals of Environmental Sampling and Analysis, First Edition*. John Wiley & Sons, Inc., pp. 47

Directed Graduate Student Theses and Research Projects (selected from a total of 80+ graduate students at UHCL)

Kholton Tidwell-Courtney, "Impact on Industrial and Ambient Air Pollution with Population Increase from 2005 to 2020 in Bexar County." 2024

Dharia Spriggs, "ICP and Voltametric analysis for lead and copper." 2023

Rebekah Dubois, "The role of native Texas trees in ozone formation by VOC emission," 2022

Liliana Gonzalez, "Air Quality during Stay-at-Home Orders and Other COVID-19 Related Activity Changes in Four Large Cities in the US," 2022

Zhaochang Hu, "Studies on Chiral HPLC Separation of Succinimide Antiepileptic Drugs," 2020

Robert Rayford, "Polar pesticide analysis by ion chromatography-integrated pulse amperometric selection," 2019

Alexander Bryant, "The effect of nanoparticle characteristics on toxicity: Use of zebrafish embryo based NBI knowledgebase," 2019

Courtney Tassin, "A Survey of Superfund Sites in Texas," 2018

Lauren Boggs, "Determining the Effects of Annual and Seasonal Temperature on Recharge Rates in the Gulf Coast Aquifer," 2018

Linda Nguyen, "Analyzing glyphosate, glufosinate, and their degradation products in water using ion-chromatography-coupled with mass spectrometry," 2018

Shantrice Ellis-Holloway, "Spatial and Temporal Water Quality Analysis of the Lower Sabine River Watershed Using Multivariate Statistical Methods." 2018

Joseph Ghossein, "Risk Assessment of Inorganic Arsenic from Dietary Intake in the United States," 2017

Susie Blake, "Enhance the Removal of Phosphorus Using Anoxic Zones: Comparison between Two Municipal Treatment Facilities," 2017

Elizabeth Sanchez, "Heavy Metals Analysis on Soil from Public Parks in Close Proximity to Major Highways in Houston," 2016

Victoria Cruz, "Disparities in Air Quality Trends on Houston's Eastside Versus the Average Air Quality in HGB," 2016

Amrit Lamichhane, "Development of LC MS/MS method for the analysis of Pharmaceuticals and Personal Care Products (PPCPs) and Hormones in Water Matrices," 2015

Anyanti Benedicta, "Optimizing Operating Parameters for Removal of Emerging Contaminants in Wastewater Treatment Plant Using the STP Model," 2015

Jason Stanley, "Iron Removal in Industrial Potable Well Water by Hypochlorite Oxidation Followed by a Post Filtration Media Composed of Manganese Dioxide," 2015

Valentin Yassinskiy, "Life Cycle Assessment of Sustainable Remediation: A Case Study on a Local Superfund Site," 2014

Andrea Clements, "Probabilistic modeling of the remediation of chlorinated solvents at an industrial facility," 2013

Jaclyn Austin, "Initial frack flowback in the Eagle Ford shale (South Texas)," 2013

Nikki Darwin, "Effects of terrestrial tannin input on water quality," 2013

Pranavanand Nyshadham, "Measurement of pharmaceuticals and personal care products in Houston's regional wastewaters," 2012

Yanan Hou, "Characterization of PM_{2.5}, and Linear Regression of PM_{2.5} with Human and Meteorological Factors in Chinese Megacities," 2013

Zhujun Zhang, "Degradation of bisphenol A with AOPs," 2013

Jahanavi Vardan, "Detection of glyphosate and AMPA in tap water using IC-LC-MS," 2012

Mohamad Azzam, "Effect of Oil Dispersants on Petroleum Solubility and Volatilization." 2012

Tonya York, "Fugacity modeling for the removal of several classes of emerging contaminants under various operational conditions," 2012

Danielle Barcebas, "Use of stable isotope analysis to describe tropic dynamics of aquatic ecosystems in Galveston Bay," 2012

Antonio Gisbert, "UNIFAX prediction of infinite activity coefficient of petroleum components in complex mixture," 2011

Ashley Ogden, "The Effectiveness of Surfactants and Dispersants on Crude Oil, and the Impact of Salinity on Surface Tension," 2011

Prince Ezebuio, "Hexavalent chromium analysis using IC post column spectrometric method," 2011

Wenjia Liu, "Fast PCB analysis using microwave-based GC-ECD," 2011

Afshin Nejabat, "Micellar Partitioning and Its Effects on Henry's Law Constant of BTEX Compounds in Anionic and Nonionic Surfactants Solutions," 2010

Brian Wilson, "Analysis of Inorganic Nitrogen and Related Anions in High Salinity Water Using Ion Chromatography with Tandem UV and Conductivity Detectors," 2010

Dong Zhai, "Optimized Selection of Landfill Sites in Houston Area Using Geographical Information System," 2010

Janee Farrar, "Degradation of Bisphenol A Using UV/H₂O₂ and Ozonation and Identification of By-products," 2010

Abidin Erez, "Ozone Analysis of Greater Houston Area and Possible Effects of Hurricane Ike on Ozone Level," 2009

Arlin Cameron, "Water Quality in Several Cities of Panama," 2009

Kelly Thompson, "Modeling Temperature Dependency in the Removal of Endocrine Disrupting Chemicals," 2009

Martin Crissa, "Temperature Effects on BTEX Partitioning," 2009

Nealam Naik, "UV-based Oxidation of Bisphenol A in Water," 2009

Vaishali Naik, "Ozonation of Bisphenol A in Water," 2009

Wasiu Lawal, "Bromate in Surface Water and Drinking Water," 2009

Mathieu Piovesan, "Sorption and Biodegradation Study of Endocrine Disrupting Compounds," 2007

Autumn Gremillion, "Chromium reduction in sediment," 2006

M Martin, "HPLC-Fluorescence on PAH and DNT," 2005

Zlanta Simunic-Grenoble, "Use of respirometer and LC/MS techniques to study the sorption and biodegradation of endocrine disruption compounds in sludge," 2005

Mark Kaulen, "Sediment contamination of PAHs in Patrick Bayou," 2004

Leticia Vega, "Determination of estrogenic levels in a simulated spacecraft wastewater solution using LC/MS," 2003

S Kandagatla, "DNT desorption from soil and leaching in soil column study," 2003

Courtney Nichols, "Effect of surfactants on the air-water partitioning of chlorinated solvents," 2003

Melissa Law, "Sorption of 2,4-dinitrotoluene and its effect on biodegradation," 2003

S Wilson, "Brio Superfund site remediation," 2002

C Ray, "PAH sorption in water-sediment," 2001

G Zheng, "PCE partitioning between air/water," 2001

J Sui, "Color of TSS in Texas Water," 2001

RESEARCH

Published Research Work

Research Books (1)

Zhang, C., Mueller, J. F., Mortimer, M. R. (2014). *Quality Assurance & Quality Control in Environmental Field Sampling* (pp. 235). London, UK: Future Science Ltd, London, UK.
<https://doi.org/10.4155/9781909453043>

Research Book Chapters (4)

Zhang, J., Zhang, C. (2014). In Zhang, C, Mueller, J.F., Mortimer, M.R. (Ed.), *Chapter 4: Quality Assurance in Surface Water Sampling, In: Quality Assurance & Quality Control in Environmental Field Sampling*. London: Future Science Ltd.
<https://doi.org/10.4155/9781909453043>

Zhang, C. (2013). *Incorporation of Green Remediation into Soil and Groundwater Cleanups* (pp. 75-84). Proceedings of First International Conference on Sustainable Human Development, Editor: Tariq M. Khan.

Zhang, C. (2012). *Environmental Analytical Chemistry* (pp. 10). Encyclopedia of Life Support Systems (EOLSS), Developed under the Auspices of the UNESCO, Eolss Publishers, Oxford, UK. <http://www.eolss.net/Sample-Chapters/C09/E6-38-14.pdf>

Zhang, C., Fortner, J., Hughes, J. B. (2004). In Magar VS, Kelley ME, eds (Ed.), *Kinetics and Stoichiometry of Dinitrotoluene Mineralization to Support in situ Vadose Zone Bioremediation*. Columbus, Ohio: Bioremediation of Energetics, Phenolics and Polycyclic Aromatic Hydrocarbons. The 7th International Symposium on In Situ and On-Site Bioremediation.

Peer-Reviewed Journal Papers (a total of 100+)

(<https://scholar.google.com/citations?user=vd8AI5wAAAAJ>; Ranked #1 in the College of Science and Engineering and ranked #3 at UHCL based on the last 5-year H-index and total citations, <https://www.adscientificindex.com/>).

Deng, J., Wei, N., Yang, X., Xiao, M., Li, X., Wang, N., Zhang, C., Zhang, H. and Dong, J. (2025), Life cycle inventory dataset for systematic environmental remediation of soil, groundwater and sediment, *Resources, Conservation & Recycling*, 212, 107960.

Zhang, J., Wang, Y., Zhang, C., Lin, D. (2025), Metabolomic and gut-microbial responses of earthworms exposed to microcystins and nano zero-valent iron in soil, *Journal of Environmental Sciences*, 150:340-348.

Meng, H., Nie, Y., Zhang, C., Li, X., Zhang, H. A global synthesis on intensity of Greenhouse Gases Emissions from the remediation of contaminated sites based on LCA methodology, *Journal of Cleaner Production*, 498: 145191

- Zhang, L., Shen, L., Huang, Y., Cui, S., Zhao, Q., Zhang, C., Zhuang, S., Jiang, G. Embryonic exposure to UV-328 impairs the cell cycle in zebrafish (*Danio rerio*) by inhibiting the p38 MAPK/p53/Gadd45a signaling pathway. *Environmental Science & Technology*, 57(27), pp.9965-997.
- Gao, Y., Qiu, Y., Wan, F., Cui, Zhao, Q., Zhao, Y., Zhang, D., Zhang, C., Zhou, J., Liu, W., Zhuang, S. (2025), PBScreen: A Server for the High-Throughput Screening of Placental Barrier-Permeable Contaminants Based on Multifusion Deep Learning." *Environmental Pollution* 370:125858.
- Zhang, L., Shen, L., Huang, Y., Cui, S., Zhao, Q., Zhang, C., Zhuang, S., Jiang, G. (2023). Embryonic Exposure to UV-328 Impairs the Cell Cycle in Zebrafish (*Danio rerio*) by Inhibiting the p38 MAPK/p53/Gadd45a Signaling Pathway. *Environ. Sci. Technol.*, 57(27), 9965-9974.
- Lu, L., Shan, L., Zhang, H., Gao, Y., Cui, S., Huang, Y., Zhu, X., Zhang, C., Lu, S., Liu, W., Zhuang, S. (2023). Angiogenic Activity and Mechanism for Low-Dose Bisphenols on Endothelial Cell and Mouse: Evidence of Structural-Selective Effect. *Environmental Science and Technology*, 57(32), 11803-11813.
- Zhang, J., Zhang, L., he, M., Zhang, C., Lin, D. (2023). Bioresponses of earthworm-microbiota symbionts to polychlorinated biphenyls in the presence of nano zero valent iron in soil. *Science of The Total Environment*, 856, 159226.
- Liu, X., Zhan, T., Gao, Y., Cui, S., Liu, W., Zhang, C., Zhuang, S. (2022). Benzophenone-1 induced aberrant proliferation and metastasis of ovarian cancer cells via activated ER α and Wnt/ β -catenin signaling pathways. *Environmental Pollution*, 292, 118370.
- Wu, H., Zhan, T., Cui, S., Chen, J., Jin, Q., Liu, W., Zhang, C., Zhuang, S. (2022). Endothelial barrier dysfunction induced by anthracene and its nitrated or oxygenated derivatives at environmentally relevant levels. *Science of The Total Environment*, 802(149793).
- Zhang, J., Cui, S., Shen, L., Gao, Y., Liu, W., Zhang, C., Zhuang, S. (2022). Promotion of Bladder Cancer Cell Metastasis by 2-Mercaptobenzothiazole via Its Activation of Aryl Hydrocarbon Receptor Transcription: Molecular Dynamics Simulations, Cell-Based Assays, and Machine Learning-Driven Prediction. *Environmental Science & Technology*, 56(18), 13254-13263.
- Zhang, X., Sun, Y., Gao, Y., Zhan, T., Cui, S., Zhang, C., Liu, W., Zhuang, S. (2022). Thyroid Dysfunction of Zebrafish (*Danio rerio*) after Early-Life Exposure and Discontinued Exposure to Tetrabromobiphenyl (BB-80) and OH-BB-80. *Environmental Science & Technology*, 56(4), 2519-2528.
- Zhao, Q., Yu, Y., Gao, Y., Shen, L., Cui, S., Gou, Y., Zhang, C., Zhuang, S., Jiang, G. (2022). Machine Learning-Based Models with High Accuracy and Broad Applicability Domains for Screening PMT/vPvM Substances. *Environmental Science & Technology*, 56(24), 17880-17889.
- Ding, T., Wei, L., Hou, Z., Li, J., Zhang, C., Lin, D. (2022). Microplastics altered contaminant behavior and toxicity in natural waters. *Journal of Hazardous Materials*, 425, 127908.
- Cui, S., Yu, Y., Zhan, T., Zhang, C., Zhuang, S. (2021). 2, 6-Di-tert-butylphenol and its quinone metabolite trigger aberrant transcriptional responses in C57BL/6 mice liver. *Science of The Total Environment*, 778, 146322.
- Cui, S., Yu, Y., Zhan, T., Gao, Y., Zhang, J., Zhang, L., Ge, Z., Liu, W., Zhang, C., Zhuang, S. (2021). Carcinogenic Risk of 2,6-Di-tert-Butylphenol and Its Quinone Metabolite 2,6-DTBQ

- Through Their Interruption of RAR β : In Vivo, In Vitro, and In Silico Investigations. *Environmental Science & Technology*.
- Zhan, T., Cui, S., Liu, X., Zhang, C., Huang, Y. M., Zhuang, S. (2021). Enhanced Disrupting Effect of Benzophenone-1 Chlorination Byproducts to the Androgen Receptor: Cell-Based Assays and Gaussian Accelerated Molecular Dynamics Simulations. *Chemical Research in Toxicology*, 34(4), 1140-1149.
- Zhan, T., Cui, S., Shou, H., Gao, L., Lu, S., Zhang, C., Zhuang, S. (2021). Transcriptome aberration in mice uterus associated with steroid hormone response and inflammation induced by dioxibenzone and its metabolites. *Environmental Pollution*, 286, 117294.
- Zhang, F., He, M., Zhang, C., Lin, D., Zhang, J. (2021). Combined toxic effects of dioxin-like PCB77 with Fe-based nanoparticles in earthworm *Eisenia fetida*. *Science of the Total Environment*, 766, 144347.
- Chen, J., Lu, P., Zhang, C., Zhu, X., Liu, W., Zhuang, S. (2021). Endothelial Dysfunction and Transcriptome Aberration in Mouse Aorta Induced by Black Phosphorus Nanomaterials of Different Sizes. *Nanoscale*, 13(19), 9018-9030.
- Zhang, J., Zhou, F., Huang, F., Liu, Y., Zhang, C. (2020). Effect of extracellular polymeric substances on arsenic accumulation in *Chlorella pyrenoidosa*. *Science of the Total Environment*, 704(15368), 1-13.
- Wu, Hao, Lu, Liping, Chen, Jiayan, Zhang, C., Liu, Weiping, Zhuang, Shulin (2020). Inhibited Nitric Oxide Production of Human Endothelial Nitric Oxide Synthase by Nitrated and Oxygenated Polycyclic Aromatic Hydrocarbons. *Environmental Science and Technology*, 54(5), 2922-2930.
- Lu, L., Wu, H., Cui, S., Zhang, T., Zhang, C., Lu, S., Lu, W., Zhuang, S (2020). Pentabromoethylbenzene Exposure Induces Transcriptome Aberration and Thyroid Dysfunction: in Vitro, in Silico and in Vivo Investigations. *Environ. Sci. Technol.*, 54(19), 12335-112344.
- Lu, L., Zhan, T., Ma, M., Xu, C., Wang, J., Zhang, C., Liu, W., Zhuang, S. (2019). Corrections to: Thyroid Disruption by Bisphenol S Analogues via Thyroid Hormone Receptor beta: in Vitro, in Vivo, and Molecular Dynamics Simulation Study (vol 52, pg 6617, 2018). *ENVIRONMENTAL SCIENCE & TECHNOLOGY*, 53(15), 9337-9337.
- Chen, Y., Zang, L., Liu, M., Zhang, C., Shen, G., Du, W., Sun, Z., Fei, J., Yang, L., Wang, Y., Wang, X., Zhao, M. (2019). Ecological risk assessment of the increasing use of the neonicotinoid insecticides along the east coast of China. *ENVIRONMENT INTERNATIONAL*, 127, 550-557.
- Cui, S., Zhang, X., Liu, J., Zhou, L., Shang, Y., Zhang, C., Liu, W., Zhuang, S. (2019). Natural sunlight-driven aquatic toxicity enhancement of 2,6-di-tert-butylphenol toward *Photobacterium phosphoreum*. *ENVIRONMENTAL POLLUTION*, 251, 66-71.
- Niu, L., Zhou, Y., Xu, C., Zhang, C., Zhou, J., Zhang, X., Liu, W. (2019). Solid fuel combustion as a major contributor of polycyclic aromatic hydrocarbons in rural China: Evidence from emission inventory and congener profiles in tree bark. *ENVIRONMENTAL POLLUTION*, 246, 621-629.
- Zhan, T., Pan, L., Liu, Z., Chen, J., Ge, Z., Lu, L., Zhang, X., Cui, S., Zhang, C., Liu, W., Zhuang, S. (2018). Metabolic Susceptibility of 2-Chlorothioxanthone and Its Toxic Effects on mRNA

- and Protein Expression and Activities of Human CYP1A2 and CYP3A4 Enzymes. *ENVIRONMENTAL SCIENCE & TECHNOLOGY*, 52(20), 11904-11912.
- Lu, L., Zhan, T., Ma, M., Xu, C., Wang, J., Zhang, C., Liu, W., Zhuang, S. (2018). Thyroid Disruption by Bisphenol S Analogues via Thyroid Hormone Receptor beta: in Vitro, in Vivo, and Molecular Dynamics Simulation Study. *ENVIRONMENTAL SCIENCE & TECHNOLOGY*, 52(11), 6617-6625.
- Zhuang, S., Lv, X., Pan, L., Lu, L., Ge, Z., Wang, J., Wang, J., Liu, J., Liu, W., Zhang, C. (2017). Benzotriazole UV 328 and UV-P showed distinct antiandrogenic activity upon human CYP3A4-mediated biotransformation. *ENVIRONMENTAL POLLUTION*, 220, 616-624.
- Ding, K., Lu, L., Wang, J., Wang, J., Zhou, M., Zheng, C., Liu, J., Zhang, C., Zhuang, S. (2017). In vitro and in silico investigations of the binary-mixture toxicity of phthalate esters and cadmium (II) to *Vibrio qinghaiensis* sp.-Q67. *SCIENCE OF THE TOTAL ENVIRONMENT*, 580, 1078-1084.
- Ding, K., Kong, X., Wang, J., Lu, L., Zhou, W., Zhan, T., Zhang, C., Zhuang, S. (2017). Side Chains of Parabens Modulate Antiandrogenic Activity: In Vitro and Molecular Docking Studies. *ENVIRONMENTAL SCIENCE & TECHNOLOGY*, 51(11), 6452-6460.
- Niu, L., Xu, C., Zhang, C., Zhou, Y., Zhu, S., Liu, W. (2017). Spatial distributions and enantiomeric signatures of DDT and its metabolites in tree bark from agricultural regions across China. *ENVIRONMENTAL POLLUTION*, 229, 111-118.
- Jiang, J., Zhang, J., Zhang, Y., Zhang, C., Tian, G. (2016). Estimating nitrogen oxides emissions at city scale in China with a nightlight remote sensing model. *SCIENCE OF THE TOTAL ENVIRONMENT*, 544, 1119-1127.
- Zhuang, S., Wang, H., Ding, K., Wang, J., Pan, L., Lu, Y., Liu, Q., Zhang, C. (2016). Interactions of benzotriazole UV stabilizers with human serum albumin: Atomic insights revealed by biosensors, spectroscopies and molecular dynamics simulations. *CHEMOSPHERE*, 144, 1050-1059.
- Xu, C., Tang, M., Zhang, H., Zhang, C., Liu, W. (2016). Levels and patterns of DDTs in maternal colostrum from an island population and exposure of neonates. *ENVIRONMENTAL POLLUTION*, 209, 132-139.
- Wang, C., Zhu, L., Zhang, C. (2015). A new speciation scheme of soil polycyclic aromatic hydrocarbons for risk assessment. *JOURNAL OF SOILS AND SEDIMENTS*, 15(5), 1139-1149.
- Zhang, J., Zhang, C. (2015). Current Techniques for Detecting and Monitoring Algal Toxins and Causative Harmful Algal Blooms. *Journal of Environmental Analytical Chemistry*, 2(1). <https://pdfs.semanticscholar.org/e511/755ab399b46c1d17aa6cc3698456b0564003.pdf>
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Other (Non-Peer Reviewed)

- LaMantagne, M., Shetty, T., Gajja, T., Kayyuru, C., Sriram, S., Zhang, C., Buddharaju, P. (2017). *HABase: A Web-Application for the Analysis of Protein Spectra and Identification of Microbial Species*. Proceedings of the 2017 International Conf. Bioinformatics and Computational Biology, BIOCOMP'17, CSREA Press (ISBN: 1-60132-450-2).
- Zhang, C. (2005). *Ambient and Drinking Water in China: The Resource and Quality Issues* (vol. Fall 2005, pp. 12-13). International Initiates.

Research Presentations (a total of ~80)

- Tidewell-Courtney, K., Zhang, C., Texas A&M University - San Antonio, Student Research Symposium, "Impact on Industrial and Ambient Air Pollution with Population Increase from 2005 to 2020 in Bexar County, Texas." (2024).
- Bhuiyan, A., Guevara, V., Amonette, W., Anne, A., Zhang, C., Texas Academy of Science 126th Annual Meeting, "Computation Fluid Dynamic (CFD) Simulation Study on Oil-Water Separation," Texas Academy of Science, San Angelo, Texas. (2023).
- Bryant, A. B., Zhang, C., 41st Annual SETAC Meeting in North America (SETAC), "The Effects of Nanoparticle Characteristics on Toxicity," Society of Environmental Toxicology and Chemistry, SciCon Virtual. (November 15, 2020).
- Nguyen, L. H., Zhang, C., 40th Annual SETAC Meeting in North America, "Concentrations and risks of glyphosate, glufosinate, and their degradation products in water determined by ion chromatography/mass spectrometry," Society of Environmental Toxicology and Chemistry (SETAC), Toronto, Canada. (November 3, 2019).
- Ghossein, J., Zhang, C., 39th Annual SETAC Meeting in North America, "Risk Assessment of Inorganic Arsenic from Dietary Intake in the United States," Society of Environmental Toxicology and Chemistry (SETAC), Sacramento, CA. (November 4, 2018).
- Zhang, R., Wu, S., Zhang, C., Lirag, R. C., 9th International Conference of Environmental Science and Technology, "Application of Engineered Cockle Shells and Zeolites for

- Phosphorus Removal in Controlling Algae Bloom in Eutrophic Water," The American Academy of Science, Houston, Texas. (June 25, 2018).
- Blake, S., Zhang, C., 38th Annual SETAC Meeting in North America, "Enhanced Removal of Phosphorus Using Anoxic Zones in Sewage Treatment Facilities: Performance Evaluation and Its Impact on Receiving Water Quality," Society of Environmental Toxicology and Chemistry (SETAC), Minneapolis, Minnesota. (November 12, 2017).
- LaMontagne, M. G., Shetty, T., Gajjar, T., Kayyuru, G., Sriram, S., Zhang, C., Buddharaju, P. K. V., 18th International Conference on Bioinformatics and Computational Biology, "HABase: A Web-Application for the Analysis of Protein Spectra and Identification of Microbial Species," Las Vegas, NV. (July 17, 2017).
- Zhang, J., Chen, J., Cao, J., Zhang, C., 37th Annual SETAC Meeting in North America & 7th SETAC World Congress, "New insight into the toxic effects of arsenic with cellular evidences in the green algae and zebra fish," Society of Environmental Toxicology and Chemistry (SETAC), Orlando, Florida. (November 6, 2016).
- Benedicta, A., Zhang, C., 37th Annual SETAC Meeting in North America & 7th SETAC World Congress, "Optimizing Operating Parameters to Enhance the removal of Emerging Contaminants in Wastewater Treatment Plants Using the STP Model," Society of Environmental Toxicology and Chemistry (SETAC), Orlando, Florida. (November 6, 2016).
- Yassinskiy, V., Zhang, C., 35th Annual SETAC meeting in North America, "Life-Cycle Case Study Comparison of Various Remediation Technologies at the Geneva Industries Superfund Site," Society of Environmental Toxicology and Chemistry (SETAC), Salt Lake City, Utah. (November 1, 2015).
- Zhang, C., Yassinskiy, V., 25th Annual SETAC Meeting in Europe, "Life Cycle Assessment for the Sustainability of Contaminated Site Remediation," Society of Environmental Toxicology and Chemistry (SETAC), Barcelona, Spain. (May 3, 2015).
- Yassinskiy, V., Zhang, C., 35th Annual SETAC Meeting in North America, "Use of openLCA for retrospective and impact assessment of sustainable remediation scenarios at the Geneva Superfund site," Society of Environmental Toxicology and Chemistry (SETAC), Vancouver, Canada. (November 9, 2014).
- Zhang, C., Azzam, M., Odgen, A. P., 2014 International Conference on Water Resource and Environmental Protection [WREP 2014], "Non-Target Analysis of Oil Dispersants and Their Effects on Petroleum Surface Tension, Solubility and Volatilization," Hong Kong, China. (June 7, 2014).
- Zhang, C., 34th Annual SETAC Meeting in North America, "Increased green remediation for soil and groundwater cleanup: Driving force, sustainable elements and assessment," Society of Environmental Toxicology and Chemistry (SETAC), Nashville, TN. (November 17, 2013).
- Zhang, C., First International Conference on Sustainable Human Development, "Incorporation of Green Remediation into Soil and Groundwater Cleanups," London, UK. (July 3, 2013).
- Azzam, M., Zhang, C., 33rd Annual SETAC Meeting in North America, "Characterization of Oil Dispersants and Their Effects on Petroleum Solubility and Volatilization," Society of Environmental Toxicology and Chemistry (SETAC), Long Beach, CA. (November 11, 2012).
- Azzam, M., Zhang, C., 32nd Annual SETAC Meeting in North America, "Toward the Full Chemical Characterization of Dispersants Used in Oil Spill," Society of Environmental Toxicology and Chemistry (SETAC), Boston, MA. (November 13, 2011).

- Mendez, A., Harris, S. P., Baki, B. A., Zhang, C., PITTCON Conference & Expo, "Petro- and Environmental Applications of Microwave-based Ultra Fast GC for the Analysis of Petro-hydrocarbons and PCBs," Atlanta, GA. (March 13, 2011).
- Zhai, D., Zhang, C., Environmental Challenges and Innovations Conference: Gulf Coast 2011, Texas Association of Environmental Professionals ECIC11 Conference, "Optimized Selection of Landfill Sites in Houston Area Using Geographical Information System," Texas Association of Environmental Professionals (TAEP), Houston, Texas. (February 10, 2011).
- Thompson, K., Zhang, C., 31st Annual SETAC Meeting in North America, "Use of fugacity model to analyze temperature-dependant removal of micro-contaminants in sewage treatment plants," Society of Environmental Toxicology and Chemistry (SETAC), Portland, OR. (November 7, 2010).
- Zhang, J., Zhou, W., Tang, X., Zhang, C., The 6th International Conference on Environmental Geochemistry in Tropics -Urban Issues, "Comparison of Polychlorinated Biphenyls Sorption in Three Soils of an Urban Area in China," Xiamen, China. (November 4, 2010).
- Zhang, C., 36th International Symposium on Environmental and Analytical Chemistry, "Sampling and Sampling Strategies for Environmental Analysis," Rome, Italy. (October 5, 2010).
- Wilson, B., Gandhi, J., Zhang, C., 22nd International Ion Chromatography Symposium (IICS 2010), "Analysis of Inorganic Nitrogen and Related Anions and Cations in Various Waters Using Ion Chromatography with Tandem Conductivity / UV Detector," Cincinnati, Ohio. (September 19, 2010).
- Gandhi, J., Shearrow, A., Zhang, C., Wilson, B., National Environmental Monitoring Conference, "Analysis of Micro Nutrients in Water," Washington, DC. (August 9, 2010).
- Zhang, C., EIH Spring Advisory Meeting, "Bisphenol A Treatment Using Ozonation and UV/H₂O₂," Environmental Institute of Houston (EIH), Houston, Texas. (March 12, 2010).
- Zhang, C., Environmental Challenges and Innovations Conferences: Gulf Coast 2010, "Challenges and Treatment Techniques for Emerging Contaminants in Water and Wastewater," Texas Association of Environmental Professionals (TAEP), Houston, Texas. (February 11, 2010).
- Naik, V., Zhang, C., 30th Annual SETAC Meeting in North America, "Advanced Oxidation of Bisphenol A in Water Stream Using Ozonation," Society of Environmental Toxicology and Chemistry (SETAC), New Orleans, Louisiana. (November 19, 2009).
- Lawal, W., Gandhi, J., Zhang, C., 65th Southwest (SWRM), American Chemical Society Meeting, "Bromide and Bromate Concentrations in Bottle Waters and Selected Tap Waters in Houston, Texas Area," American Chemical Society (ACS), El Paso, TX. (November 4, 2009).
- Zhang, C., EIH Fall Advisory Meeting, "Removal of Bisphenol A in Water Using Ozonation and UV-based Photodegradation," Environmental Institute of Houston (EIH), University of Houston, Main Campus. (October 29, 2009).
- Gandhi, J., Zhang, C., Lawal, W., 21st International Ion Chromatography Symposium (IICS 2009), "Trace Level Determination of Bromate in Drinking Water by Direct Injection Ion Chromatography and Suppressed Conductivity Detection," Dublin, Ireland. (September 21, 2009).

- Piovesan, M., Zhang, C., 29th Annual SETAC Meeting in North America, "Sorption of endocrine disrupting compounds and its environmental implications," Tampa, Florida. (November 16, 2008).
- Piovesan, M., Zhang, C., 4th International Conference on Environmental Science and Technology, the American Academy of Sciences, "Adsorption of Endocrine Disrupting Compounds and Its Environmental Implications," The American Academy of Sciences (AAS). (July 28, 2008).
- Piovesan, M., Zhang, C., Society of Environmental Toxicology and Chemistry South Central Regional Chapter Annual Meeting, "Sorption of endocrine disrupting compounds and the environmental significance," Society of Environmental Toxicology and Chemistry (SETAC), Houston, Texas. (May 15, 2008).
- Adam, N., Gandhi, J., Zhang, C., 28th Annual SETAC Meeting in North America, "Determination of Bromide and Bromate in Drinking Water and Surface Water Using LC/MS and IC/MS," Society of Environmental Toxicology and Chemistry (SETAC), Milwaukee, Wisconsin. (November 11, 2007).
- Russek, A. J., Zhang, C., The Third International Conference on Environmental Science and Technology, American Academy of Sciences, "Remediation of Hexavalent Chromium via Zero Valent Iron: Batch Study Using Aged Iron," American Academy of Sciences, Houston, Texas. (August 6, 2007).
- Russek, A. J., Zhang, C., Annual Meeting of the American Association for the Advancement of Science Southwestern and Rocky Mountain Division (AAAS-SWARM), "Remediation of Hexavalent Chromium via Zero Valent Iron: A Batch Study Using Aged Iron," The American Association for the Advancement of Science (AAAS), Houston, Texas. (April 18, 2007).
- Grenoble, Z., Zhang, C., Environmental Institute of Houston Brown Bag Lecture Series, "Respirometer Study and Simulation of the Biodegradation Process of Endocrine Disrupting Compounds in Wastewater Treatment Plants," Environmental Institute of Houston, Houston, Texas. (2006).
- Grenoble, Z., Zhang, C., 27th Annual SETAC Meeting in North America, "Sorption and Biodegradation of Two Natural Endocrine Disrupters in a Simulated Activated Sludge Process," Society of Environmental Toxicology and Environmental Chemistry (SETAC), Montreal, Canada. (November 5, 2006).
- Grenoble, Z., Zhang, C., Hedrick, J., 102nd Gulf Coast Conference, "Analysis of Natural and Synthetic Steroids by LC/MS in ESI-negative and ESI-positive Mode," Galveston, Texas. (October 17, 2006).
- Adam, N., Zhang, C., Gandhi, J., 19th Annual International Ion Chromatography Symposium, "Trace Level Determination of Bromate and Bromide in Purified Seawater by High Efficiency Ion-Exchange Liquid Chromatography and Electro-spray Mass Spectrometry," Pittsburg, PA. (September 24, 2006).
- Grenoble, Z., Zhang, C., 2nd International Conference on Environmental Science and Technology, "Respirometer Study and Simulation of the Biodegradation Process of Endocrine Disrupting Compounds in Wastewater Treatment Plants," American Academy of Sciences, Houston, Texas. (August 19, 2006).
- Grenoble, Z., Zhang, C., South Central Regional SETAC Chapter Meeting, "Sorption Effects on Biodegradation of EDCs in Batch Reactors Simulating Wastewater Treatment Plants,"

- Society of Environmental Toxicology and Environmental Chemistry (SETAC), Denton, TX. (May 18, 2006).
- Kaulen, M. A., Zhang, C., 26th Annual SETAC Meeting in North America, "A Chemodynamic Sediment Flux Model in TMDLs Determination of PAHs in Patrick Bayou, Texas," Society of Environmental Toxicology and Environmental Chemistry (SETAC), Baltimore, Maryland. (November 13, 2005).
- Grenoble, Z., Zhang, C., 26th Annual SETAC Meeting in North America, "Use of Respirometer and LC/MS to Study the Sorption and Biodegradation of Endocrine Disrupting Compounds," Society of Environmental Toxicology and Environmental Chemistry (SETAC), Baltimore, Maryland. (November 13, 2005).
- Zhang, C., Environmental Institute of Houston Brown Bag Lecture Series, "Endocrine Disrupting Chemicals (EDCs) in the Environment," Environmental Institute of Houston, Houston, Texas. (February 23, 2005).
- Zhang, C., Law, M. D., Deeb, R., Hughes, J. B., 25th Annual SETAC Meeting in North America, "Nitroaromatic Pollutant Migration at VAAP Site: Bench-Scale Sorption and Leachability Studies," Society of Environmental Toxicology and Chemistry, Portland, Oregon. (November 14, 2004).
- Zhang, C., Aman, M. B., Hughes, J. B., 25th Annual SETAC Meeting in North America, "Reduction of Cr(VI) by Elemental Iron: Batch Study and Implications to Groundwater and Sediment Remediation," Society of Environmental Toxicology and Chemistry, Portland, Oregon. (November 14, 2004).
- Zhang, C., UHCL BIOL 6838 Research Project and Seminar, "Anaerobic Bacteria in Bioremediation and Biotechnological Applications," Houston, Texas. (November 8, 2004).
- Zhang, C., Zheng, G., Nichols, C. M., 78th American Chemical Society (ACS) Colloid and Surface Science Symposium, Yale University, "Micellar Partitioning of Chlorinated Solvents in Anionic and Nonionic Surfactant Solutions," American Chemical Society (ACS), Yale University, New Haven, CT. (June 20, 2004).
- Aman, M. B., Hughes, J. B., Zhang, C., 10th Annual Student Conference for Research & Creative Arts, "The Reduction of Cr(VI) to Cr(III) by Elemental Iron: Batch Remediation Feasibility Study with and without Sediment," University of Houston-Clear Lake, Houston, Texas. (April 21, 2004).
- Law, M. D., Zheng, G., Zhang, C., 24th Annual SETAC Meeting in North America, "Sorption and Biodegradation of Sorbed Dinitrotoluene in Model Soil Systems: Implications to Remediation," Society of Environmental Toxicology and Chemistry (SETAC), Austin, Texas. (November 9, 2003).
- Vega, L., Zhang, C., Hedrick, J., Gulf Coast Conference, "Determination of Estrogenic Levels in a Simulated Spacecraft Wastewater Solution Using LC/MS," Galveston, TX. (October 21, 2003).
- Zhang, C., Fortner, J. D., Hughes, J. B., 7th International Symposium on In Situ and On-Site Bioremediation, "Kinetics and Stoichiometry of 2,4-Dinitrotoluene Mineralization To Support In-Situ Vadose Zone Bioremediation," Orlando, Florida. (June 4, 2003).
- Zhang, C., Zheng, G., Holston, G., Lambert, G., SETAC South Central Regional Chapter Meeting, "Potential Release of Polycyclic Aromatic Hydrocarbons (PAHs) from Contaminated

- Sediment in Galveston Bay-Houston Ship Channel," Society of Environmental Toxicology and Chemistry, Armand Bayou Nature Center, Houston, TX. (April 24, 2003).
- Law, M. D., Zheng, G., Zhang, C., SETAC South Central Regional Chapter Meeting, "Sorption Behavior and Its Effect on the Biodegradation of 2,4-Dinitrotoluene," Society of Environmental Toxicology and Chemistry, Armand Bayou Nature Center, Houston, TX. (April 24, 2003).
- Law, M. D., Zheng, G., Zhang, C., 9th Annual Student Conference for Research & Creative Arts, "Sorption Behavior of Dinitrotoluenes in Various Soils and Sorbents," Houston, Texas. (April 22, 2003).
- Zhang, C., Zheng, G., Holston, G., Lambert, G., Environmental Institute of Houston Brown Bag Lecture Series, "Potential PAH Release from Contaminated Sediment in Galveston Bay-Houston Ship Channel," Environmental Institute of Houston, Houston, Texas. (April 8, 2003).
- Zhang, C., Zheng, G., Holston, G., Lambert, G., Sixth Biennial State of the Bay Symposium, "Potential PAH Release from Contaminated Sediment in Galveston Bay-Houston Ship Channel," , League City, Texas. (January 14, 2003).
- Zhang, C., Fortner, J. D., Hughes, J. B., 23rd Annual SETAC Meeting in North America, "Respirometer Studies on 2,4-Dinitrotoluene and Implications to In-Situ Vadose Zone Bioremediation," Society of Environmental Toxicology and Chemistry, Salt Lake City, Utah. (November 11, 2002).
- Zhang, C., Zheng, G., Nichols, C. M., 224th ACS National Meeting, "Effect of Surfactants on the Vapor-Water Partitioning of Chlorinated Solvents," American Chemical Society (ACS), Boston, Massachusetts. (August 18, 2002).
- Fortner, J. D., Zhang, C., Finnessy, K. E., Hughes, J. B., NSF-Pan-American Advanced Study Institute, "In Situ Biostimulation of Dinitrotoluene Mineralization in Vadose Zone Soils: Bench-Scale Analysis, Innovative Approaches to the in-situ Assessment and Remediation of Contaminated Sites," Rio de Janeiro, Brazil. (July 22, 2002).
- Zhang, C., Fortner, J. D., Hughes, J. B., Society of Environmental Toxicology and Chemistry, 2002 South Central Regional Meeting, "Respirometer Study to Optimize 2,4-Dinitrotoluene Mineralization in Vadose Zone," Society of Environmental Toxicology and Chemistry, Lubbock, Texas. (June 6, 2002).
- Zheng, G., Nichols, C. M., Zhang, C., 8th Annual Student Conference for Research & Creative Arts, "Effect of Surfactants on the Henry's Law Constant of Chlorinated Solvents," Houston, Texas. (April 17, 2002).
- Zhang, C., Fortner, J. D., Finnessy, K. E., Hughes, J. B., The Third International Conference on Remediation of Chlorinated and Recalcitrant Compounds, "Bench-scale analysis of in-situ dinitrotoluene bioremediation for vadose zone soils," Monterey, California. (April 17, 2002).
- Zhang, C., Environmental Institute of Houston Brown Bag Lecture Series, "Bioremediation of Dinitrotoluenes in Soils: Identification of Limiting Factors," Environmental Institute of Houston, Houston, Texas. (November 8, 2001).
- Zhang, C., Hughes, J. B., 22nd Annual SETAC Meeting in North America, "Kinetics and Pathways of Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX) by *Clostridium acetobutylicum*," Society of Environmental Toxicology and Chemistry, Baltimore, Maryland. (October 24, 2001).

- Zhang, C., Hughes, J. B., Daprato, R. C., Nishino, S. F., Spain, J. C., International Conference on Environmental Concerns and Emerging Abatement Technologies, "Bioslurry Treatment of Dinitrotoluene Contaminated Soils: Process Feasibility and Strategies for Low-cost Monitoring," Beijing, China. (October 9, 2001).
- Zhang, C., Hughes, J. B., Daprato, R. C., Nishino, S. F., Spain, J. C., 6th International Symposium on In Situ and On-Site Bioremediation, "Stoichiometry of Dinitrotoluene Mineralization in a Pilot-Scale Slurry-Phase Bioreactor System," San Diego, California. (June 4, 2001).
- Daprato, R. C., Zhang, C., Hughes, J. B., Innovative Approaches to the On-Site Assessment and Remediation of Contaminated Sites, NATO Advanced Study Institute, "Interpretation and Modeling Reactor Performance for the Aerobic Bioremediation of Dinitrotoluene Contaminated Soils," Prague, Czech Republic. (May 2001).
- Sui, X., Muirhead, D. L., Jackson, W. A., Zhang, C., 7th Annual Student Conference for Research & Creative Arts, "The Color of Total Suspended Solids: A New Tool for Remote Sensing and Environmental Monitoring of Surface Water Quality," University of Houston-Clear Lake, Houston, Texas. (April 18, 2001).
- Spain, J., Nishino, S. F., Zhang, C., Hughes, J. B., The Strategic Environmental Research and Development Program Symposium, "DNT Degradation in Soil from Badger Army Ammunition Plant," Hyatt Regency Crystal City, Arlington, VA. (December 30, 1999).
- Zhang, C., Nishino, S. F., Hughes, J. B., Spain, J., Second International Symposium on Biodegradation of Nitroaromatic Compounds and Explosives, "Aerobic Biodegradation of 2,4-Dinitrotoluene and 2,6-Dinitrotoluene in a Pilot-Scale Sequential Slurry Reactor System," Leesburg, VA. (September 8, 1999).
- Tadros, M. G., Crawford, A., Mateo-Sullivan, A., Zhang, C., Hughes, J. B., Second International Symposium on Biodegradation of Nitroaromatic Compounds and Explosives, The Fifth International Symposium, "Toxic Effects of Hydroxylamino Intermediates from Microbial Transformation of Trinitrotoluene and Dinitrotoluenes on Algae *Selenastrum capricornutum*," San Diego, CA. (September 8, 1999).
- Hughes, J. B., Wang, C., Zhang, C., Padda, R. S., Clark, S., Bennett, G., In Situ and On-Site Bioremediation, The Fifth International Symposium, "Reduction of Nitroaromatic Explosives by *Clostridium acetobutylicum*," San Diego, CA. (April 19, 1999).
- Zhang, C., Valsaraj, K. T., Constant, W. D., Roy, S., Industrial and Engineering Chemistry (IE&C) Special Symposium on Emerging Technologies in Hazardous Waste Management, IX, "Aerobic Biodegradation of Surfactants Applied in Soil Washing for the Clean-up of a Louisiana Superfund Site," American Chemical Society, Pittsburgh, PA. (September 15, 1997).
- Zhang, C., Constant, W. D., Valsaraj, K. T., Roy, D., Industrial and Engineering Chemistry (IE&C) Special Symposium on Emerging Technologies in Hazardous Waste Management, IX, "Nutrient and Surfactant Augmentation for the Biodegradation of Chlorinated Hydrocarbons in the Wastewater from a Louisiana Superfund Site," American Chemical Society, Pittsburgh, PA. (September 15, 1997).
- Valsaraj, K. T., Constant, W. D., Zhang, C., Symposium of American Water Resources Association Louisiana Section, "Wastewater Treatment Using Polyaphrons," Gonzales, Louisiana. (October 1995).

Zhang, C., First National Symposium of Graduates in Environmental Sciences, "Effects of Chromium on Soybean Growth, Physiology, Nodulation and Nitrogen Fixation," Qing-Hua University, Beijing, China. (August 1986).

Other Presentations Given

Zhang, C., Zhejiang University Lecture Series, "Striving for Innovation and Excellence in Environmental Research," Zhejiang University, Hangzhou, China. (August 12, 2015).

Zhang, C., Future Science Group Author's Lecture Series, "e-Publishing to Meet Today's Education & Technology Challenges: A Perspective from an Environmental Educator & Researcher," Future Science Group, London, UK, London, UK. (July 4, 2013).

Zhang, C., Zhejiang University Lecture Series, "Water Environmental Chemistry – From Fundamentals to Future Frontiers," Zhejiang University, Hangzhou, China. (April 9, 2013).

Zhang, C., Zhejiang University Lecture Series, "Reviewers' and Editors' Roles in Publishing Your Papers," Zhejiang University, Hangzhou, China. (March 10, 2013).

Zhang, C., Zhejiang University Lecture Series, "Environmental Professionals in Meeting the Dynamic Challenges: Global Perspectives and Case Studies," Hangzhou, China. (May 30, 2012).

Zhang, C., Zhejiang University Lecture Series, "Study on Legacy and Emerging Organic Contaminants: Our Research Challenges and Future Perspectives," Zhejiang University, Hangzhou, China. (June 28, 2011).

Zhang, C., University of Houston-Clear Lake, Scholarly Lecture Series, "Environmental Science: We Should All Care," UHCL Provost's Office, University of Houston-Clear Lake. (November 17, 2010).

Zhang, C., The University of Texas Health Science Center at Houston Lecture Series, "Soil and Groundwater Remediation," The University of Texas Health Science Center at Houston, Houston, Texas. (March 23, 2009).

Zhang, C., Zhejiang University Seminar Series, "Surfactants in Aquifer Remediation: Research Promise and Challenge," Zhejiang University, Hangzhou, China. (August 2005).

Zhang, C., Zhejiang University Seminar Series, "Compounds of Emerging Environmental Concerns: Challenges and Opportunities in Chemodynamics and Remediation," Zhejiang University, Hangzhou, China. (December 18, 2003).

Zhang, C., SETAC North America Regional Meeting, "Bioremediation of Explosives Contaminated Soils: Strategies for In Situ Vadose Zone Remediation and Ex Situ Bioslurry Reactors," Department of Civil Engineering, Texas Tech University, Lubbock, Texas. (June 7, 2002).

Zhang, C., UHCL BIOL 6838 Research Project and Seminar, "Bioremediation for a Cleaner Environment: A Case Study on the Strategies Using Slurry-Phase Bioreactor," University of Houston - Clear Lake, Houston, Texas. (November 2001).

Zhang, C., Channel Industries Mutual Aid (CIMA) 2001 Training Symposium, "Highly Toxic Chemicals in Houston Ship Channel," Pasadena, Texas. (October 24, 2001).

Research Contracts and Sponsored Research Grants (\$860 k)

Zhang, C. (Principal), "Acquisition of fast GC from PAC," Sponsored by Petroleum Analyzer Company (PAC, L.P.), Local, \$32,000.00. (2005 - Present).

Zhang, C. (Principal), "Acquisition of IC-UV-CD from Metrohm USA," Sponsored by Metrohm USA, Other, \$107,195.00. (2004 - Present).

Zhang, C. (Principal), "Acquisition of Agilent HPLC-MS," Sponsored by Agilent Technologies, Other, \$150,000.00. (2003 - 2006).

Zhang, C. (Principal), "Reactive capping using elemental iron to enhance reductive processes in Anacostia River sediments," Sponsored by Rice University, Private, \$15,000.00. (2002).

Zhang, C. (Principal), "Bench-Scale Analysis of in situ Aerobic Dinitrotoluene Bioremediation for Vadose Zone Soils," Sponsored by Strategic Environmental Research and Development Program (SERDP), DoD, EPA, DoE, Federal, \$15,600.00. (2000 - 2001).

Zhang, C. (Principal), "Fate and transport of emerging contaminants," Sponsored by Environmental Institute of Houston (EIH), State, \$100,266.00. (2000 - 2007).

Zhang, C. (Principal), "Nitroaromatic pollutant migration at VAAP site: Bench-scale sorption and leachability study," Sponsored by Department of Army, U.S. Corps of Engineer through Malcolm Pirnie, Inc. (MPI), Federal, \$20,000.00. (2003).

Zhang, C., "Gift-In-Kind of 7500 Inductively Coupled Plasma – Mass Spectrometry (ICP-MS)," Sponsored by Nalco Champion, an Ecolab Company, Fresno, Texas, Local, \$120,000.00. (2020).

SERVICE

Department / Program Service

Founder, Department of Environmental Science, Approved by THECB, 2018

Program Chair, Environmental Science. (January 2005 - August 2018):

Developed 100% on-line master's degree program in 2011.

Ranked #7 in affordability among 35 online environmental science master's degree programs nationwide (2016).

Ranked 25th nationally for best nonprofitcollegeonline.com among 35 online Environmental Science MS degree programs (2017)

Biotechnology Program member. (2005 - Present).

Chemistry Program member. (2000 - Present).

Environmental Science Program member. (2000 - Present).

Industrial Hygiene and Safety Program member. (2000 - 2018).

College Service

Lab Manager, Advanced Science Instrumentation Lab (ASIL). (2000 - Present).

CSE Mentoring Committee (2023-)

CSE Peer Teaching Evaluation Committee (2022-2023)

Committee Member, Promotion and Tenure. (2006 - Present).

Committee Member, EIH Graduate Student Admission. (2023).

Committee Chair, Promotion (Senior Lecturer). (2023).

Committee Member, Policy and Advisory Committee. (2009 - 2023).

Committee Member, College of Science and Engineering Associate Dean Search Committee. (2022).

Committee Member, Peer Teaching Evaluation committee. (2020 - 2022).

Committee Member, CSE Strategic Plan Committee. (2020 - 2021).

Committee Member, CSE Promotion and Tenure Guideline Committee. (2018 - 2021).

Committee Chair, Promotion and Tenure. (2007 - 2021).

Committee Member, CSE Internship Committee. (2018 - 2019).

Faculty Search, Chair/Member. (2002 - 2016).

Committee Member, Faculty Development Fund (FDF) Committee. (2008 - 2015).

Committee Member, Third Year Review Chair/Member. (2008 - 2013).

Staff Search, Member. (2002 - 2006).

Committee Member, Student Affairs Committee. (2001 - 2006).

University Service

University Promotion and Tenure Committee (2024)

University Faculty Fellowships Advisory Group (2024-2025)

Search Committee for the Dean of College of Science and Engineering, 2024

Search Committee for Executive Director of EIH, 2024

Task Force Member, Bayou Building Renovation Project. (2023 - Present).

Committee Member, University Professor Council. (January 1, 2024 - December 2024).

Committee Member, Search Committee for Executive Director of the Environmental Institute of Houston (EIH). (2023 - 2024).

Member, Emeritus Committee of the Council of Professor. (2018 - 2022).

Committee Member, Core Curriculum Assessment Committee (CCAC). (2016 - 2019).

Committee Member, Provost Ad Hoc Committee on Research. (2016).

Committee Member, STEM Building Planning Committee for a proposed \$120 million state budget. (2015).

Committee Member, President's Distinguished Faculty Awards Committee (PDFA). (2014).

Committee Member, Faculty Senator Committee. (2006 - 2007).

Program Organizer, Teaching Environmental Science sponsored by Texas Commission on Environmental Quality (TCEQ). (2003 - 2007).

Committee Member, University Food Advisory Committee. (2002 - 2005).

Committee Member, University Student Life Committee. (2002 - 2005).

Attendee, Meeting, Cultural immersion and international events at UHCL. (2001 - 2002).

Professional Service

Professional Memberships

American Chemical Society (ACS)-Division of Environmental Chemistry. (2000 -)

Association of Environmental Engineering and Science Professors (AEESP) (2022-)

National Society of Professional Engineers (NSPE). (2008 -)

Society of Environmental Toxicology and Chemistry (SETAC). (2001 -)

The Louisiana Engineering Society (LES). (2008 -)

Advisory Board / Editorial Board / Committee

Joint Task Group (JTG) for Standard Method 1090 Laboratory Occupational Health and Safety, American Public Health Association, 2024-2025

Expert Panel for Green and Low-Carbon Environmental Remediation in China: 2023 Status Report

Advisor Board, National Key Lab of Environment and Resources, Zhejiang University. (2021 - Present).

Editorial Board, Society of Environmental Toxicology and Chemistry. 2006 – 2008.

Editorial Board Member, Water, Air, and Soil Pollution journal. (2010 - Present).

Editorial Board Member, The Scientific World Journal. (2011 - 2013).

Standard Method Committee, Standard Methods for the Examination of Water and Wastewater, 22nd, 23rd, 24th edition, The American Public Health Association (APHA), the American Water Works Association (AWWA), and the Water Environment Federation (WEF). (2004-Present).

Water Environmental Federation (WEF) Literature Review Committee, Physico-chemical Processes in Treatment Systems. (2003 - 2008).

Student Awards Subcommittee: SETAC 22nd Annual Meeting in North America, Baltimore, Maryland, November 11-15, 2001. (2001).

Conference Organizer / Session Chair / Judge

Session Chair, Advances in Environmental Sampling and Analysis, 33rd Annual SETAC Meeting in North America, Long Beach, CA. (November 11, 2012 - November 15, 2012).

Session Chair, Advances in Environmental Sampling and Analysis, 32nd Annual SETAC Meeting in North America, Boston, MA. (November 13, 2011 - November 17, 2011).

Session Chair, Advances in Environmental Sampling and Analysis, 31st Annual SETAC Meeting in North America, Portland, OR. (November 7, 2010 - November 11, 2010).

Session Chair, Advances in Environmental Sampling and Analysis, 30th Annual SETAC Meeting in North America, New Orleans, LA. (November 19, 2009 - November 23, 2009).

Session Chair, Advances in Environmental Sampling and Analysis, 29th Annual SETAC Meeting in North America, Tampa, FL. (November 16, 2008 - November 20, 2008).

Session Chair, Contaminated Harbor and River Sediment, 28th Annual SETAC Meeting in North America, Milwaukee, Wisconsin. (November 11, 2007 - November 15, 2007).

Session Chair, Phytoremediation, The Third International Conference on Environmental Science and Technology, Houston, Texas. (August 6, 2007 - August 9, 2007).

Session Chair, Environmental Science, The American Association for the Advancement of Science Southwestern and Rocky Mountain Division (AAAS-SWARM), Houston, Texas. (April 18, 2007 - April 21, 2007).

Session Chair, Contaminated Harbor and River Sediment, 27th Annual SETAC Meeting in North America, Montreal, Canada. (November 5, 2006 - November 10, 2006).

Session Chair, Contaminated Harbor and River Sediment, 26th Annual SETAC Meeting in North America, Baltimore, MD. (November 13, 2005 - November 17, 2005).

Session Chair, Contaminated Harbor and River Sediment, 25th Annual SETAC Meeting in North America, Portland, Oregon. (November 14, 2004 - November 18, 2004).

Session Chair, Contaminated Harbor and River Sediment, 24th Annual SETAC Meeting in North America, Austin, Texas. (November 9, 2003 - November 13, 2003).

Judge for student presentations: 40th SETAC Meeting in North America, Toronto, Canada. (2019).

Journal Papers Reviewed (A total of ~300 manuscripts for 47 journals)

AIMS Environmental Science

American Association of Pharmaceutical Scientists
 Applied Microbiology and Biotechnology
 Arabian Journal for Science and Engineering
 Archives of Environmental Contamination and Toxicology
 ASCE Journal of Environmental Engineering
 ASME Journal of Energy Resources Technology
 Atmospheric Environment
 Bioresource Technology
 Biotechnology and Bioengineering
 Canadian Journal of Microbiology
 Chemical Engineering & Technology
 Chemical Engineering Journal
 Chemosphere
 Chirality
 CLEAN - Soil, Air, Water
 Colloids and Surfaces A: Physicochemical and Engineering Aspects
 Ecotoxicology and Environmental Safety
 Environmental Engineering Science
 Environmental International
 Environmental Monitoring and Assessment
 Environmental Pollution
 Environmental Science & Technology
 Environmental Science and Pollution Research
 Environmental Toxicology and Chemistry
 Frontiers of Environmental Science & Engineering
 International Journal of Environmental Analytical Chemistry
 Journal of Agricultural and Food Chemistry
 Journal of Atmospheric Chemistry
 Journal of Environmental Engineering
 Journal of Environmental Quality
 Journal of Environmental Science
 Journal of Hazardous Materials
 Journal of Radioanalytical and Nuclear Chemistry
 Journal of Soils and Sediments
 Journal of Zhejiang University
 Langmuir
 Medicinal Chemistry
 Peer J.
 Process Biochemistry
 Science
 Science of the Total Environment
 Scientific Report
 The Arabian Journal for Science and Engineering
 The Scientific World Journal
 Water Research
 Water, Air, and Soil Pollution

Book / Book Chapter Reviewed (46 book/book chapter/book proposal reviewed, for 12 publishers)

American Chemical Society
 Cambridge University Press
 CRC Press - A Taylor & Francis Company
 Elsevier
 John Wiley & Sons
 Jones and Bartlett Publishers

Lewis Publishers
Oxford University Press
Springer
Standard Method, 22nd Edition, APHA, AWWA, WEF
Taylor & Francis Group/CRC Press
W.H. Freeman and Company Publishers, New York, NY

Research Grant Proposals Reviewed / Review Panel

The Legislative-Citizen Commission on Minnesota Resources Review, Oak Ridge Associated University (ORAU)/Oak Ridge Institute for Science and Education (ORISE), 2024, 2025
Grant Proposal, Nazarbayev University. (2023).
Institute for Space Systems Operations (ISSO), 2005, 2010
Israeli Ministry of Science, Technology and Space
LSU BP Gulf Research Initiative (GRI), 2011
Mississippi-Alabama Sea Grant
National Science Foundation (NSF), 2006-2007, 2008.
National Science Foundation / Us Department of Agriculture (NSF/USDA) (2006-2007)
Singapore National Research Foundation. (2002).
Strategic Environmental Research and Development Program (SERDP) –A Consortium of U.S. Environmental Protection Agency (EPA), Department of Defense (DoD), and Department of Energy (DoE), 2005-2006, 2008, 2011, 2014
U.S. Geological Survey (USGS) and National Institutes for Water Resources (NIWR) National Competitive Grants Program, 2002-2004

Public Service

Judge, 2024 Baker Institute Student Forum (BISF) Policy Competition: Environmental Policy, Baker Institute, Rice University

Science Fair Judge & UHCL Special Award Judge: Houston Science and Engineering Fair. (2002 - Present).

Science Fair Faculty Advisor: Clear Lake High School, Clear Brook High School, North Pointe Elementary School, Space Center Intermediate. (2001 - Present).

Advisory Board, Lee College NSF Transforming Undergraduate Education in Science (TUES) proposal. (2011).

Houston Food Bank: Volunteer, Houston, Texas. (2005 - 2010).

Science Fair Judge: Seabrook Intermediate School, Seabrook, Texas. (2001 - 2003).

Science Fair Judge, Lead Judge and Grand Award Judge: Clear Creek High School District (CCISD), Houston, Texas. (2002).

Guest Speaker, Highly Toxic Chemicals in Houston Ship Channel” in Channel Industries Mutual Aid (CIMA) 2001 Training Symposium, Pasadena, Texas. (October 24, 2001 - October 25, 2001).

Science Fair Judge: Post Oak High School, Houston, Texas. (1999).

Consulting

HydroGeoLogic, Inc. (2005 - 2014).

Rice University. (2001 - 2002).

Tyndall Air Force Base, Applied Research Inc., Armstrong Laboratory. (February 1999 - June 1999).

Zhejiang Environmental Engineering Company, China. (1991).