CURRICULUM VITAE

Zhi (George) Zhou

Ph.D., P.E., BCEE, ENVSP

School of Civil and Construction Engineering and
Division of Environmental and Ecological Engineering
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EDUCATION

2007	Ph.D.	Department of Civil and Environmental Engineering, University of
		Illinois at Urbana-Champaign, IL
2002	M.S.	Department of Environmental Science, Nanjing University, China
1999	B.S.	Department of Environmental Science, Nanjing University, China

LICENSURE and CERTIFICATION

2018-present	Envision Sustainability	Institute for Sustainable Infrastructure
_	Professional (ENV SP)	
2017–present	Board Certified Environmental	American Academy of Environmental
	Engineer (BCEE)	Engineers & Scientists
2010-present	Professional Engineer (PE, Civil:	California Board for Professional
	Water Resources and Environmental)	Engineers, Land Surveyors, and
		Geologists
2010	Certificate on "Developing	Accreditation Board for Engineering and
	Sustainable Program Assessment	Technology (ABET), Inc.
	Processes" workshop	
2003-2006	Certified Livestock Manager	Illinois Department of Agriculture, IL

PROFESSIONAL EXPERIENCE

08/2020–present	Associate Professor	Civil and Construction Engineering and Environmental and Ecological Engineering, Purdue University, West
/ /		Lafayette, IN
06/2014-07/2020	Assistant Professor	Civil Engineering and Environmental and Ecological
		Engineering, Purdue University, West Lafayette, IN
06/2022-06/2022	Affiliated Faculty	Institute for a Sustainable Future, Purdue University
04/2017-06/2022	Affiliated Faculty	Center for the Environment, Purdue University
02/2017–present	Affiliated Faculty	Purdue Policy Research Institute, Purdue University
06/2014–present	Affiliated Faculty	Interdisciplinary Graduate Program of Ecological
		Sciences & Engineering, Purdue University
02/2010-05/2014	Assistant Professor	Department of Civil and Environmental Engineering,
		National University of Singapore (NUS), Singapore
06/2013-07/2013	Visiting Professor	School of Engineering and Applied Sciences, Harvard
		University, Cambridge, MA
07/2007-01/2010	Consulting Engineer	Carollo Engineers, Inc., Walnut Creek, CA
08/2002-06/2007	Research Assistant	University of Illinois at Urbana-Champaign (UIUC),
		Urbana, IL

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10/2004-1	11/2004 Visiting Student	The French National Centre for Scientific Research, National Chemical Engineering Science Laboratory
		(CNRS, ENSIC), Nancy, France
09/2000-0	06/2002 Research Assistant	Nanjing University, Jiangsu, China
06/1998–0	06/1999 Research Assistant	Nanjing University, Jiangsu, China
02/1998-0	06/1998 Intern	National Environmental Protection Bureau, Nanjing,
		Jiangsu, China
	S AND AWARDS	
02/2024	0 0 0	chers, College of Engineering, Purdue University
12/2023	Most Impactful Faculty Inver	•
11/2023	Seed for Success Acorn Awar	· ·
03/2023	Long service Award, PLOS C	
08/2021	0 0 0	chers, College of Engineering, Purdue University
04/2019		of Environmental and Ecological Engineering Graduate
11/2018	Students, Purdue University	ontribution in Reviewing of journal Renewable Energy
10/2018	S	ontribution in Reviewing of journal Environmental
10/2016	International	intribution in Reviewing of Journal Environmental
04/2018		ontribution in Reviewing of journal Bioresource
04/2010	Technology	intribution in Reviewing of Journal Diolesource
02/2018	0 ,	ontribution in Reviewing of journal Science of the Total
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07/2017		ontribution in Reviewing of journal Chemical Engineering
,	Journal	
01/2010		hinese American Environmental Professionals
	Association, Oakland, CA	
05/2007	Graduate College Conference	Travel Award, UIUC
05/2007	Racheff Graduate Student Tra	avel Award, UIUC
05/2006	Racheff Graduate Student Tra	avel Award, UIUC
06/2005		ard (second class), Nanjing, China
05/2005	Racheff Graduate Student Tra	avel Fund Award, UIUC
05/2004	American Society for Microbi	
08/2002	University Fellowship, UIUC	
08/2002	John W. Page Fellowship, UT	
06/2001	Excellence Fellowship, Nanjii	ng University
HONIOD		
	S AND AWARDS OF ADVIS	
08/2024		Ph.D. student) in the best poster presentation awards at
		ited States Department of Agriculture (USDA) When
0/22024	Blue is Green project	Dla D. student) in the best nector necessation expends at
0/22024		Ph.D. student) in the best poster presentation awards at
	Blue is Green project	ited States Department of Agriculture (USDA) When
03/2024	1 /	yTechUp Competition held by the United States
03/2024	0.	f) for Team Carbonbusters by Sharon Hughes (Ph.D.
		(Ph.D. student), Nathaniel Bone (M.S. student), and Neha
	arumma, and minanda Lopez (i ii.D. studenty, i vaniamet Done (w.s. studenty, and ivena

Shakelly

07/2027			CV - Zhou		
04/2023		nture Challenge Audience Choice Award in the F	Purdue Innovates Startup		
04/2023	category competi	on in the Great Lakes region and Technology Bo of Fossil Energy and Carbon Management for the tion held by DOE for Team Carbonbusters by Sl	ne EnergyTechUp		
02/2022	Technol Manager	and Amanda Lopez (Ph.D. student), and Neha Shakelly Technology Bonus Prize semifinalist for the category of Fossil Energy and Carbon Management in the Great Lakes region for the EnergyTech University Prize competition held by DOE for Team Carbonbusters led by Sharon Hughes (Ph.D.			
05/2018	Best pos	ster award in 39th Annual Indiana Water Resourc Sun (Ph.D. student), Purdue University	es Association Symposium		
06/2012	Excellen	ace Award of Environmental Science and Engine in Du (senior student), NUS	ering Poster Symposium for		
06/2012	Merit Av	ward of Environmental Science and Engineering ii Lin (senior student), NUS	Poster Symposium for		
08/2011	_	at's Graduate Fellowship for Xinzhu Yi (Ph.D. stu	udent), NUS		
GRANTS 2024-2026	(28) PI	Bioaccumulation and biotransformation of	United States Geological		
2023-2025	PI	PFAS and their precursors in the environment Retention of PFAS on Spent Filters	Survey (USGS) Water Quality Research Foundation (WQRF)		
2023-2028	Co-PI	When blue is green: sustainable blue food systems driven by integrated aquaponics	USDA		
2023-2024	Co-PI	Surveillance and mitigation of airborne pathogens in learning environments	Purdue University		
2022-2024	PI	A biomimicry-based carbon-negative shot that generates revenue	National Science Foundation (NSF)		
2022-2023	PI	Fungal wastewater treatment	Higher Education Commission of Pakistan		
2022-2025	Co-PI	Advancing remote sensing of the biogeochemical state of midwestern inland waters	National Aeronautics and Space Administration (NASA)		
2021–2023	Co-PI	Agile Reform of EEE Curriculum	Agile Reform of Curriculum Innovation Grants, Purdue		
2021–2022	Co-PI	Cost-effective and affordable defluoridation treatment	Shah Family Global Innovation Lab		
2019–2020	PI	Southport advanced wastewater treatment plant – phosphorus control	t Citizen's Energy Group		
2018–2020	PI	Emerging contaminant removal and microbial growth in membrane filtration and activated carbon point-of-use (POU) systems	WQRF		
2018–2019	PI	Evaluation of our current and other available anti-icing/de-icing products under controlled	Indiana Department of Transportation		
2018	PI	environmental conditions to test effectiveness Nature-inspired cost-effective production of biofuels with algal viruses	Purdue Research Foundation (PRF)		

2017–2019	PI	Effects of viruses on the development of	USGS
2017	PI	harmful algal blooms Anti-fouling electrochemical graphene/carbon nanotube ceramic membrane for wastewater treatment	PRF
2016	PΙ	Development of electrochemical membranes to reduce biofouling for water purification	Purdue EEE Support for Exploratory Research
2015–2016	PI	Microbial source tracking for Gunpowder Creek Watershed in Kentucky	÷ •
2015–2016	PI	Artificial photosynthesis for efficient biofuel production with bioeletrocatalyzed reduction of CO ₂	PRF
2015	Co-PI	Recovery of nutrients from animal and human wastes	Bio Town AG Inc.
2014–2016	Co-PI	Development of ceramic-based electrochemical graphene filter for oil & gas wastewater treatment	General Electric-NUS Environmental Research Institute
2013–2016	PI	Rapid and accurate quantification of antibiotic resistant bacteria and quantitative risk assessment for water security	Singapore Environment & Water Industry
2013–2015	Co-PI	Guidelines for engineered storage for direct potable reuse systems	U.S. WateReuse Research Foundation
2013–2015	PI	Development of electrochemical carbon nanotube filters to remove off-flavor compounds	Singapore Environment & Water Industry
2012–2014	Co-PI	Interaction of microbial consortia in anaerobic MBR treating high organic strength waste	General Electric
2012–2014	PΙ	A new type of photosynthesis through electrode-driven anaerobic respiration	Singapore Ministry of Education
2012–2014	PI	Photoelectrochemical water splitting for the production of value-added chemicals	Singapore, Peking, and Oxford Research Enterprise
2011–2014	Co-PI	Development of microbial fuel cell sensor for detection of used water toxicity	Singapore Public Utilities Board
2010–2013	PI	Evaluation of MLS _B antimicrobial resistance at environmental samples	Singapore Ministry of Education

JOURNAL PUBLICATIONS (51)

- 1. Yu, H.-Y., S. Gupta, and **Z. Zhou** (2024). "Removal of metals and assimilable organic carbon by activated carbon and reverse osmosis point-of-use water filtration systems." *Chemosphere* 365: 143251.
- 2. Bhatt, P., B.A. Engel, K.B. Shivaram, R.F. Turco, **Z. Zhou**, and H. Simsek (2024). "Treatment and optimization of high-strength egg-wash wastewater effluent using electrocoagulation and electrooxidation methods." *Chemosphere* 347: 140632.
- 3. Li, G., B. Li, M. Yu, J. Wang, L. Jiang, Y. Yu, X. Sha, X. He, and **Z. Zhou** (2023). "Assessing the efficiency of ozone-based advanced drinking water treatment processes in removing

antibiotics and antibiotic-resistant genes: Pilot-scale research." *Journal of Water Process Engineering* 55: 104146.

- 4. Jiang, L., W. Zhai, J. Wang, G. Li, **Z. Zhou**, B. Li, and H. Zhuo (2023). "Antibiotics and antibiotic resistance genes in the water sources of the Wuhan stretch of the Yangtze River: Occurrence, distribution, and ecological risks." *Environmental Research* 239: 117295.
- 5. Chen, P., H.-J. Kim, L.R. Thatcher, J.M. Hamilton, M.L. Alva, **Z. Zhou**, and P.B. Brown (2023). "Maximizing nutrient recovery from aquaponics wastewater with autotrophic or heterotrophic management strategies." *Bioresource Technology Reports* 21: 101360.
- 6. Wang, J., X. Sha, X. Chen, H. Zhuo, W. Xie, **Z. Zhou**, X. He, L. Wu, and B. Li (2022). "Removal and distribution of antibiotics and resistance genes in conventional and advanced drinking water treatment processes." *Journal of Water Process Engineering* 50: 103217.
- 7. Lin, S., **Z. Zhou**, H. Wu, S. Yin, and Y. Wang (2022). "Electrochemical oxidation of aniline using a high-flux CNT filter." *Journal of Water Process Engineering* 46: 102536.
- 8. Tian, M., H. Wang, X. Li, D. Li, **Z. Zhou**, and B. Li (2021). "Efficiency of hybrid systems enhanced with different sludge ratios in improving resistance to short-term low temperatures." *Journal of Environmental Management* 297: 113398.
- 9. Chen, L., S. Gao, L. Lou, and **Z. Zhou** (2021). "Removal of intracellular and extracellular antibiotic resistance genes from swine wastewater by sequential electrocoagulation and electro-Fenton processes." *Environmental Engineering Science* 38(2): 74-80.
- 10. Sun, Z., E.R. Blatchley III, and **Z. Zhou** (2020). "Using algal virus *Paramecium bursaria* chlorella virus as a human adenovirus surrogate for validation of UV treatment systems." *Environmental Science & Technology*.
- 11. Chen, L., **Z. Zhou**, C. Shen, and Y. Xu (2020). "Inactivation of antibiotic-resistant bacteria and antibiotic resistance genes by electrochemical oxidation/electro-Fenton process." *Water Science and Technology* 81(10): 2221-2231.
- 12. Zhang, Y., C. Li, Y. Wu, Y. Zhang, **Z. Zhou**, and B. Cao (2019). "A microfluidic gradient mixer-flow chamber as a new tool to study biofilm development under defined solute gradients." *Biotechnology and Bioengineering* 116(1): 54-64.
- 13. Yi, X., M. Wang, and **Z. Zhou** (2019). "The potential impact of naturally produced antibiotics, environmental factors, and anthropogenic pressure on the occurrence of erm genes in urban soils." *Environmental Pollution* 245: 282-289.
- 14. Yi, X., C. Lin, E.J.L. Ong, M. Wang, and **Z. Zhou** (2019). "Occurrence and distribution of trace levels of antibiotics in surface waters and soils driven by non-point source pollution and anthropogenic pressure." *Chemosphere* 216: 213-223.
- 15. Yi, X., C. Lin, E.J.L. Ong, M. Wang, B. Li, and **Z. Zhou** (2019). "Expression of resistance genes instead of gene abundance are correlated with trace levels of antibiotics in urban surface waters." *Environmental Pollution* 250: 437-446.
- 16. Sun, Z. and **Z. Zhou** (2019). "Nature-inspired virus-assisted algal cell disruption for cost-effective biofuel production." *Applied Energy* 251: 113330.
- 17. Li, B., W. Yan, Y. Wang, H. Wang, **Z. Zhou**, Y. Li, and W. Zhang (2019). "Effects of key enzyme activities and microbial communities in a flocculent-granular hybrid complete autotrophic nitrogen removal over nitrite reactor under mainstream conditions." *Bioresource Technology* 280: 136-142.
- 18. Li, B., Y. Wang, J. Li, L. Yang, X. Li, **Z. Zhou**, Y. Li, X. Chen, and L. Wu (2019). "The symbiosis of anaerobic ammonium oxidation bacteria and heterotrophic denitrification bacteria in a size-fractioned single-stage partial nitrification/anammox reactor." *Biochemical Engineering Journal*.

19. Salehi, M., M. Abouali, M. Wang, **Z. Zhou**, A.P. Nejadhashemi, J. Mitchell, S. Caskey, and A.J. Whelton (2018). "Case study: Fixture water use and drinking water quality in a new residential green building." *Chemosphere* 195: 80-89.

- 20. Pruden, A., R.E. Alcalde, P.J.J. Alvarez, N. Ashbolt, H. Bischel, N.L. Capiro, E. Crossette, D. Frigon, K. Grimes, C.N. Haas, K. Ikuma, A. Kappell, T. LaPara, L. Kimbell, M. Li, X. Li, P. McNamara, Y. Seo, M.D. Sobsey, E. Sozzi, T. Navab-Daneshmand, L. Raskin, M.V. Riquelme, P. Vikesland, K. Wigginton, and Z. Zhou (2018). "An Environmental Science and Engineering Framework for Combating Antimicrobial Resistance." Environmental Engineering Science 35(10): 1005-1011.
- 21. Liu, C., Y. Sun, D. Wang, Z. Sun, M. Chen, **Z. Zhou**, and W. Chen (2017). "Performance and mechanism of low-frequency ultrasound to regenerate the biological activated carbon." *Ultrasonics Sonochemistry* 34: 142-153.
- 22. He, H. and **Z. Zhou** (2017). "Electro-Fenton process for water and wastewater treatment." *Critical Reviews in Environmental Science and Technology* 47(21): 2100-2131.
- 23. Le, T.-H., C. Ng, H. Chen, X.Z. Yi, T.H. Koh, T.M.S. Barkham, **Z. Zhou**, and K.Y.-H. Gin (2016). "Occurrences and characterization of antibiotic resistant bacteria and genetic determinants of hospital wastewaters in a tropical country." *Antimicrobial Agents and Chemotherapy* 60(12): 7449-7456.
- 24. Jing, H., S. Cheung, **Z. Zhou**, C. Wu, S. Nagarajan, and H. Liu (2016). "Spatial variations of the methanogenic communities in the sediments of tropical mangroves." *PLOS One* 11(9): e0161065.
- 25. Jame, S.A. and **Z. Zhou** (2016). "Electrochemical carbon nanotube filters for water and wastewater treatment." *Nanotechnology Reviews* 5(1): 41-50.
- 26. Goyal, N., **Z. Zhou**, and I.A. Karimi (2016). "Metabolic processes of Methanococcus maripaludis and potential applications." *Microbial Cell Factories* 15(1): 107.
- 27. Yi, X., S. Bayen, B.C. Kelly, X. Li, and **Z. Zhou** (2015). "Improved detection of multiple environmental antibiotics through an optimized sample extraction strategy in liquid chromatography-mass spectrometry analysis." *Anal Bioanal Chem* 407(30): 9071-83.
- 28. Liu, Y., J. Xie, C.N. Ong, C.D. Vecitis, and **Z. Zhou** (2015). "Electrochemical wastewater treatment with carbon nanotube filters coupled with in situ generated H₂O₂." *Environmental Science: Water Research & Technology* 1(6): 769-778.
- 29. Liu, Y., H. Liu, **Z. Zhou**, T. Wang, C.N. Ong, and C.D. Vecitis (2015). "Degradation of the common aqueous antibiotic tetracycline using a carbon nanotube electrochemical filter." *Environmental Science & Technology* 49(13): 7974-7980.
- 30. Jing, H., X. Xia, H. Liu, **Z. Zhou**, C. Wu, and S. Nagarajan (2015). "Anthropogenic impact on diazotrophic diversity in the mangrove rhizosphere revealed by nifH pyrosequencing." *Front Microbiol* 6: 1172.
- 31. Goyal, N., M. Padhiary, I.A. Karimi, and **Z. Zhou** (2015). "Flux measurements and maintenance energy for carbon dioxide utilization by *Methanococcus maripaludis*." *Microbial Cell Factories* 14: 146.
- 32. Liu, Y., J.H.D. Lee, Q. Xia, Y. Ma, Y. Yu, L.Y.L. Yung, J. Xie, C.N. Ong, C.D. Vecitis, and **Z. Zhou** (2014). "A graphene-based electrochemical filter for water purification." *Journal of Materials Chemistry A* 2(39): 16554-16562.
- 33. Le, T.-H., V. Sivachidambaram, X. Yi, X. Li, and **Z. Zhou** (2014). "Quantification of polyketide synthase genes in tropical urban soils using real-time PCR." *Journal of Microbiological Methods* 106(0): 135-142.

34. Goyal, N., H. Widiastuti, I.A. Karimi, and **Z. Zhou** (2014). "A genome-scale metabolic model of *Methanococcus maripaludis* S2 for CO₂ capture and conversion to methane." *Molecular BioSystems* 10(5): 1043-54.

- 35. Bayen, S., X. Yi, E. Segovia, **Z. Zhou**, and B.C. Kelly (2014). "Analysis of selected antibiotics in surface freshwater and seawater using direct injection in liquid chromatography electrospray ionization tandem mass spectrometry." *Journal of Chromatography A* 1338: 38-43.
- 36. Zhang, Y., C. Zhang, D.B. Parker, D.D. Snow, **Z. Zhou**, and X. Li (2013). "Occurrence of antimicrobials and antimicrobial resistance genes in beef cattle storage ponds and swine treatment lagoons." *Science of the Total Environment* 463-464: 631-8.
- 37. Zhang, Y., D.D. Snow, D. Parker, **Z. Zhou**, and X. Li (2013). "Intracellular and extracellular antimicrobial resistance genes in the sludge of livestock waste management structures." *Environmental Science & Technology* 47(18): 10206-13.
- 38. Nagarajan, S., S.K. Chou, S. Cao, C. Wu, and **Z. Zhou** (2013). "An updated comprehensive techno-economic analysis of algae biodiesel." *Bioresource Technology* 145: 150-6.
- 39. **Zhou, Z.** (2012). "Enhancing engineering students' learning in an environmental microbiology course." *Journal of Microbiology & Biology Education* 13(2): 191-192.
- 40. **Zhou, Z.**, L. Raskin, and J.L. Zilles (2010). "Effects of swine manure on macrolide, lincosamide, and streptogramin B antimicrobial resistance in soils." *Applied & Environmental Microbiology* 76(7): 2218-2224.
- 41. **Zhou, Z.**, L. Raskin, and J.L. Zilles (2009). "Macrolide resistance in microorganisms at antimicrobial-free swine farms." *Applied & Environmental Microbiology* 75(18): 5814-5820.
- 42. Vadiveloo, E., R. Cisterna, H. Breitenkam, J. Lopez, R. Harris, T. Greiner, P. Pitt, K. Alexander, R. Latimer, P. Vinci, **Z. Zhou**, and A. Salveson (2009). "Identifying the feasibility of canal recharge for indirect potable reuse: the Plantation experience." *Florida Water Resources Journal*(8): 38-43.
- 43. Finney, B., R. Gearheart, A. Salveson, **Z. Zhou**, M. Burke, and J.C. Ly (2009). "Water and wastewater treatment technologies appropriate (WAWTTAR), a planning tool for selecting wastewater treatment technologies." *Water Environment & Technology*(10): 51-54.
- 44. **Zhou, Z.**, M.N. Pons, L. Raskin, and J.L. Zilles (2007). "Automated image analysis for quantitative fluorescence *in situ* hybridization with environmental samples." *Applied & Environmental Microbiology* 73(9): 2956-2962.
- 45. Yang, L., L. Xiao, **Z. Zhou**, D. Pei, and X. Wang (2004). "Effect of pH on adsorption of phenol to organic montmorillonite." *Environmental Chemistry* 23(2): 183-187.
- 46. Yang, L., **Z. Zhou**, L. Xiao, and X. Wang (2003). "Chemical and biological regeneration of HDTMA-modified montmorillonite after sorption with phenol." *Environmental Science & Technology* 37(21): 5057-5061.
- 47. Yang, L., **Z. Zhou**, and L. Xiao (2003). "Study on adsorption of phenol to HDTMA-modified montmorillonite and its mechanism." *Shanghai Environmental Sciences* 22(7): 456-458.
- 48. Shi, X., F. Wang, L. Jiang, **Z. Zhou**, L. Yang, Z. Kong, G. Gao, and B. Qin (2003). "Effect of temperature on the transformation of exogenous ³²P in water column, *Microcystis aeruginosa* and sediments." *Chinese Journal of Applied Ecology* 14(11): 1967-1970.
- 49. Yang, L., L. Jiang, **Z. Zhou**, Y. Chen, and X. Wang (2002). "The sedimentation capabilities of hexadecyltrimethylammonium-modified montmorillonites." *Chemosphere* 48(4): 461-466.
- 50. Yang, L., Q. Fu, L. Jiang, **Z. Zhou**, D. Pei, and X. Wang (2002). "The stability of organic matters adsorbed on organoclay." *China Environmental Science* 22(1): 52-55.
- 51. **Zhou, Z.** and L. Yang (2001). "Screening of phenol degrading yeast and its characteristics." *Journal of Nanjing University* 37(6): 724-729.

BOOK CHAPTERS (4)

1. Goyal, N., I.A. Karimi, and **Z. Zhou**, "Experimental validation of *in silico* flux predictions from a genome-scale model (iMM518) for carbon dioxide utilization by *M. maripaludis*." in *Computer Aided Chemical Engineering*, K.V. Gernaey, J.K. Huusom, and R. Gani, Editors. 2015, Elsevier. p. 2153-2158.

- 2. Kashinath, S. and **Z. Zhou**, "Utilization of landfill gas as a renewable source of energy in India." in *Sustainability Matters*. 2014. p. 193-229.
- 3. Goyal, N., H. Widiastuti, I.A. Karimi, and **Z. Zhou**, "Genome-scale metabolic network reconstruction and in silico analysis of Methanococcus maripaludis S2." in *Computer Aided Chemical Engineering*, A. Kraslawski and I. Turunen, Editors. 2013, Elsevier. p. 181-186.
- 4. **Zhou, Z.** and L. Yang, "Bioremediation technology of polluted environment." in *Environmental Microbiological Techniques*. 2003, Science Press: Beijing.

CONFERENCE PROCEEDINGS, POSTERS, AND PRESENTATIONS (123)

- 1. Su, H. and **Z. Zhou** (2024). "Development of an automated monitoring system for aquaponic wastewater treatment." *Annual Meeting of USDA When Big is Green Project*, West Lafayette, IN.
- 2. Pettenati, G., E. Ken-Opurum, and **Z. Zhou** (2024). "Microbial growth in point-of-use water filtration systems." *Purdue Undergraduate Research Conference*, West Lafayette, IN.
- 3. Montalvo, F., E. Ken-Opurum, G.W. Singer, L.S. Lahari Lingam, and **Z. Zhou** (2024). "Enhancing water access and health in drought-affected regions: A preliminary study on point-of-use water filter intervention." *Association of Environmental Engineering and Science Professors Research and Education Distinguished Lecture Conference*, Urbana, IL.
- 4. López-Patiño, A.M., A. Cárdenas-Orrego, A.F. Torres, D. Navarrete, P. Champagne, V. Ochoa-Herrera, and **Z. Zhou** (2024). "Cost-effective water treatment and energy production with microalgae." Association of Environmental Engineering and Science Professors Research and Education Distinguished Lecture Conference, Urbana, IL.
- 5. Ken-Opurum, E., G. Pettenati, and **Z. Zhou** (2024). "Effects of different concentrations of phosphorus on horizontal gene transfer." Association of Environmental Engineering and Science Professors Research and Education Distinguished Lecture Conference, Urbana, IL.
- 6. Hui, W., Y. Tan, Z. Chen, and **Z. Zhou** (2024). "Development of ceramic electrochemical filtration for emerging contaminant removal." *Annual Meeting of USDA When Big is Green Project*, West Lafavette, IN.
- 7. Hui, W., Y. Tan, Z. Chen, and **Z. Zhou** (2024). "Electrochemical filtration for emerging contaminant removal." Association of Environmental Engineering and Science Professors Research and Education Distinguished Lecture Conference, Urbana, IL.
- 8. Britto, A., K. Osen, K. Cherkauer, and **Z. Zhou** (2024). "Remote sensing of water quality " *Purdue Undergraduate Research Conference*, West Lafayette, IN.
- 9. Montalvo, F., E. Ken-Opurum, and **Z. Zhou** (2023). "Point-of-use systems for the removal of pathogens and heavy metals in drinking water in South America." *Association of Environmental Engineering and Science Professors Research and Education Distinguished Lecture Conference*, South Bend, IN.
- 10. Hui, W., R. Li, and **Z. Zhou** (2023). "Effects of pH on metal leaching from activated carbon block filters." Association of Environmental Engineering and Science Professors Research and Education Distinguished Lecture Conference, South Bend, IN.
- 11. Fan, Q. and **Z. Zhou** (2023). "Groundwater defluoridation with electrocoagulation." Association of Environmental Engineering and Science Professors Research and Education Distinguished Lecture Conference, South Bend, IN.

12. Chen, S., K. Cherkauer, M. Crawford, **Z. Zhou**, C. Troy, A. Slotke, N.H.V. Pham, and S. Tan (2023). "Remote sensing of Midwestern U.S. water quality." *3rd Annual Harmful Algal Bloom Symposium*.

- 13. Montalvo, F., E. Ken-Opurum, and **Z. Zhou** (2022). "Removal of Legionella in drinking water with point-of-use water filters." *Association of Environmental Engineering and Science Professors Research and Education Conference*, Washington, D.C.
- 14. Ken-Opurum, E., F. Montalvo, H.-Y. Yu, S. Gupta, C. Graham, and **Z. Zhou** (2022). "Fouling development and microbial growth in point-of-use water filtration systems." *Association of Environmental Engineering and Science Professors Research and Education Conference*, St. Louis, MO.
- 15. Gupta, S., H.-Y. Yu, C. Graham, and **Z. Zhou** (2022). "Assessment of chemical and biological factors for the removal of emerging contaminants in activated carbon and membrane filtration point-of-use water filters." *Association of Environmental Engineering and Science Professors Research and Education Conference*, St. Louis, MO.
- 16. Yu, H.-Y., S. Gupta, S. Hong, H. Congleton, B. Jolkovsky, S. Mendelson, and **Z. Zhou** (2021). "Removal of assimilable organic carbon in activated carbon and reverse osmosis water filtration systems." *26th Annual Environmental Engineering and Science Symposium*.
- 17. Ken-Opurum, E., C. Graham, L. Peng, A.L.S. Gonzalez, H.-y. Yu, S. Gupta, N. Zyaykina, and **Z. Zhou** (2021). "Microbial growth and PFAS removal in point-of-use water filtration systems." *IWA Biofilm Reactors Conference*, Notre Dame, IN.
- 18. Graham, C., S. Gupta, H.-Y. Yu, and **Z. Zhou** (2021). "Removal of per- and polyfluoroalkyl substances (PFAS) in point-of-use (POU) activated carbon and membrane filtration systems." *26th Annual Environmental Engineering and Science Symposium*.
- 19. Bi, Y., S. Gupta, H.-Y. Yu, and **Z. Zhou** (2021). "Removal of manganese and uranium in tap water with point-of-use filtration systems." *26th Annual Environmental Engineering and Science Symposium*.
- 20. Sun, Z., **Z. Zhou**, and E.R. Blatchley III (2020). "Using algal virus *Paramecium bursaria* chlorella virus (PBCV-1) as a human adenovirus surrogate for the validation of UV treatment systems." *International UV Association*, Orlando, FL.
- 21. Graham, C., S. Gupta, and **Z. Zhou** (2020). "Impacting factors on removal efficiency of perand polyfluoroalkyl substances (PFAS) in activated carbon and membrane filtration systems." *Purdue University Fall Undergraduate Research Exposition*, West Lafayette, IN.
- 22. Bi, Y., H.-Y. Yu, and **Z. Zhou** (2020). "Metal removal in tap water with point-of-use water filtration systems." *Purdue University Fall Undergraduate Research Exposition*, West Lafayette, IN.
- 23. **Zhou, Z.** (2019). "Drivers and barriers of antibiotic resistance in urban and natural environments." Association of Environmental Engineering and Science Professors Research and Education Conference, Tempe, AZ.
- 24. **Zhou, Z.** (2019). "Smart and resilient storm water management system." *Indiana Department of Transportation Research Program Innovation Fair*, Indianapolis, IN.
- 25. **Zhou, Z.** (2019). "Evaluation of emerging contaminants to support cost-effective storm water quality management." *Indiana Department of Transportation Research Program Innovation Fair*, Indianapolis, IN.
- 26. Wang, M. and **Z. Zhou** (2019). "Selective pressure of trace level antibiotics on the development of antibiotic resistance and horizontal gene transfer." Association of Environmental Engineering and Science Professors Research and Education Conference, Tempe, AZ.
- 27. Sun, Z. and **Z. Zhou** (2019). "UV radiation as a water treatment strategy for algal cultivation Inactivation of algal virus measured by plaque assay and qPCR." Association of Environmental Engineering and Science Professors Research and Education Conference, Tempe, AZ.

28. Sun, Z., E.R. Blatchley III, and Z. Zhou (2019). "Application of UV irradiation to inactivate parasites in algal cultivation." *AlgalBBB 2019: The 9th International Conference on Algal Biomass, Biofuels and Bioproducts*, Boulder, CO.

- 29. Ji, Y., B. McCullouch, and **Z. Zhou** (2019). "Life cycle assessment of environmental impacts of conventional and alternative anti-icing and de-icing chemicals." *Indiana Department of Transportation Research Program Innovation Fair*, Indianapolis, IN.
- 30. Ji, Y., B. McCullouch, and **Z. Zhou** (2019). "Sustainability of commercially available anti-icing and de-icing chemicals." *Association of Environmental Engineering and Science Professors Research and Education Conference*, Tempe, AZ.
- 31. **Zhou, Z.** (2018). "Evaluation of biodegradable de-icing agents for sustainable ice and snow control." *Indiana Department of Transportation Research Program Innovation Fair*, Indianapolis, IN.
- 32. Wang, M. and **Z. Zhou** (2018). "Selective pressure of trace level antibiotics on the development of antibiotic resistance and horizontal gene transfer." Association of Environmental Engineering and Science Professors Research and Education Distinguished Lecture Conference, West Lafayette, IN.
- 33. Sun, Z. and **Z. Zhou** (2018). "Effects of viruses on the development and decay of harmful algal blooms." *39th Indiana Water Resources Association Symposium*, Bloomington, IN.
- 34. Sun, Z., S. Wu, and **Z. Zhou** (2018). "Nature-inspired virus-assisted lipid extraction for efficient biofuel production with microalgae *Chlorella* sp." *Association of Environmental Engineering and Science Professors Research and Education Distinguished Lecture Conference*, West Lafayette, IN.
- 35. Li, B., J.T. Li, **Z. Zhou**, R. Huang, and Y.N. Liang (2018). "The possible role of different aggregates in nitrogen removal in single-stage Autotrophic nitrogen removal process." Association of Environmental Engineering and Science Professors Research and Education Distinguished Lecture Conference, West Lafayette, IN.
- 36. Chen, R., M. Wang, and **Z. Zhou** (2018). "Effect of carbon nanotube on horizontal gene transfer in microbes." Association of Environmental Engineering and Science Professors Research and Education Distinguished Lecture Conference, West Lafayette, IN.
- 37. Blatchley III, E.R., J.V. Sinfield, W.T. Horton, L. Lu, Z. Nyssa, C. Mitchell, G. Burniske, **Z. Zhou**, J. Sullivan, D. Schuster, and E. Cronin (2018). "Potential for recovery and reuse of heat from municipal wastewater treatment facilities in urban areas." *International Water Association Specialized International Conferences on Ecotechnologies for Wastewater Treatment*, London, Ontario, Canada.
- 38. Yi, X., M. Wang, and **Z. Zhou** (2017). "Selective pressure of trace levels of antibiotics on phenotypic antibiotic resistance in urban surface waters and soils." *American Society for Microbiology 117th General Meeting*, New Orleans, LA.
- 39. Yi, X., M. Wang, Q. Wei, and **Z. Zhou** (2017). "Occurrence and distribution of erythromycin resistance methylase (*erm*) genes in urban surface waters without impact of treated wastewater." *Association of Environmental Engineering and Science Professors Research and Education Conference*, Ann Arbor, MI.
- 40. Wu, S., Z. Sun, and **Z. Zhou** (2017). "Improvement of lipid extraction in algal biodiesel production with sonication." *Purdue University Undergraduate Research and Poster Symposium*, West Lafayette, IN.
- 41. Wang, M., M.S. Esfandarani, A. Whelton, and **Z. Zhou** (2017). "Chemical leaching and microbial growth in drinking water pipes in a newly commissioned residential building." *23rd Annual Environmental Engineering & Science Symposium at University of Illinois*, Champaign, IL.
- 42. Sun, Z., P. Mrutyunjay, and **Z. Zhou** (2017). "Microbial eletrosynthesis of biofuels with *Blautia* strains." *American Society for Microbiology 117th General Meeting*, New Orleans, LA.

43. Sun, T., N.-A. Nguyen, Z. Sun, and **Z. Zhou** (2017). "Acetate production through microbial electrosynthesis as an intermediate for biofuels production." *Purdue University Undergraduate Research and Poster Symposium*, West Lafayette, IN.

- 44. Stryker, B.M., S. Park, and **Z. Zhou** (2017). "Removal of lead with electrochemical multiwalled carbon nanotube filters." *23rd Annual Environmental Engineering & Science Symposium at University of Illinois*, Champaign, IL.
- 45. Park, S. and **Z. Zhou** (2017). "Performance and mechanisms of electrochemical carbon nanotube filtration to remove antibiotic resistant bacteria and antibiotic resistance genes." *Association of Environmental Engineering and Science Professors Research and Education Conference*, Ann Arbor, MI.
- 46. Park, S., X. Jin, and **Z. Zhou** (2017). "Removal of bacteria and DNA from wastewater using electrochemical multi-walled carbon nanotube filters." *23rd Annual Environmental Engineering & Science Symposium at University of Illinois*, Champaign, IL.
- 47. Padhiary, M., K. Walczak, N. Goyal, Z. Sun, and **Z. Zhou** (2017). "Efficient biofuel production through microbial electrosynthesis." 23rd Annual Environmental Engineering & Science Symposium at University of Illinois, Champaign, IL.
- 48. Padhiary, M., Z. Sun, and **Z. Zhou** (2017). "Microbial electrosynthesis of biofuels using mixture culture in activated sludge." *Association of Environmental Engineering and Science Professors Research and Education Conference*, Ann Arbor, MI.
- 49. Nguyen, N.-A., T. Sun, Z. Sun, and **Z. Zhou** (2017). "Acetate production through microbial electrosynthesis as an intermediate for biofuel production." *23rd Annual Environmental Engineering & Science Symposium at University of Illinois*, Champaign, IL.
- 50. He, H. and **Z. Zhou** (2017). "Removal of recalcitrant compounds with a flow through electro-Fenton carbon nanotube filters." *23rd Annual Environmental Engineering & Science Symposium at University of Illinois*, Champaign, IL.
- 51. He, H. and **Z. Zhou** (2017). "Efficient wastewater treatment in a carbon nanotube-based electro-Fenton system." *Association of Environmental Engineering and Science Professors Research and Education Conference*, Ann Arbor, MI.
- 52. Chen, R., M. Wang, Z. Sun, P. Sol, and **Z. Zhou** (2017). "Electrochemical treatment to remove chemical contaminants in landfill leachate." *Association of Environmental Engineering and Science Professors Research and Education Conference*, Ann Arbor, MI.
- 53. Wang, M., M. Scott, M. Jacobs, and **Z. Zhou** (2016). "Microbial source tracking of fecal bacteria in surface waters in Gunpower Creek watershed in Kentucky." *American Society for Microbiology 116th General Meeting*, Boston, MA.
- 54. Wang, M., M.S. Esfandarani, A. Whelton, and **Z. Zhou** (2016). "Effects of water temperature and TOC leached from PEX pipes on the occurrence of bacteria in household water distribution systems." *American Society for Microbiology 116th General Meeting*, Boston, MA.
- 55. Nguyen, N.-A., Z. Sun, and **Z. Zhou** (2016). "Efficient biofuel production through microbial electrosynthesis." *Purdue University Undergraduate Research and Poster Symposium*, West Lafayette, IN.
- 56. Yi, X., Q. Wei, and **Z. Zhou** (2015). "Occurrence of erythromycin resistance methylase (*erm*) genes driven by environmental antibiotics in urban soils." *Critical Zone Science, Sustainability and Services in a Changing World*, West Lafayette, IN.
- 57. Yi, X., C. Lim, J.L.E. Ong, M. Wang, and **Z. Zhou** (2015). "Correlation between trace levels of antibiotics and phenotypic antibiotic resistance in urban environmental samples." *Association of Environmental Engineering and Science Professors Research and Education Conference*, New Haven, CT.

58. Wang, T. and **Z. Zhou** (2015). "Effects of selective pressure of erythromycin on the development of antibiotic resistance in *E. coli*." *American Society for Microbiology 115th General Meeting*, New Orleans, LA.

- 59. Padhiary, M., K. Walczak, N. Goyal, Z. Sun, and **Z. Zhou** (2015). "Bioeletrocatalyzed reduction of CO₂ to higher alcohols and acids using mixed cultures of acetogens and acetate-utilizing *Clostridium* strains." *Association of Environmental Engineering and Science Professors Research and Education Conference*, New Haven, CT.
- 60. Liu, Y., J. Xie, **Z. Zhou**, and C.N. Ong (2015). "Electrochemical filter technology in water treatment." 8th International Conference on Materials for Advanced Technologies, Singapore.
- 61. Liu, Y., Q. Xia, Y. Kong, J. Xie, C.N. Ong, C. Vecitis, S.A. Jame, T. Wu, and **Z. Zhou** (2015). "Improvement of electrochemical wastewater treatment with carbon nanotube filters coupled with *in situ* generated H₂O₂." *Association of Environmental Engineering and Science Professors Research and Education Conference*, New Haven, CT.
- 62. Goyal, N., I.A. Karimi, and **Z. Zhou** (2015). "Influence of nitrogen limitation on methanogenesis and growth in *M. maripaludis*." *13th International Conference on Carbon Dioxide Utilization*, Singapore.
- 63. E. Kallmyer, N., Z. Sun, K. Harris, Z. Zhou, and E.R. Blatchley III (2015). "Recovery of nutrients from animal and human wastes." *Purdue University Summer Fellowship Research Fellowship Symposium*, West Lafayette, IN.
- 64. Delgadillo Ordoñez, N., L. Nies, R. Turco, and Z. Zhou (2015). "Effects of Lithium on anaerobic microbial communities of sludge, an exploratory study." *Undergraduate Research Experience Purdue-Colombia Research Symposium*, West Lafayette.
- 65. Goyal, N., I.A. Karimi, and **Z. Zhou** (2014). "Genome based metabolic flux analysis (MFA) of *Methanococcus maripaludis* for improved methane productivity." *American Institute of Chemical Engineers Annual Meeting*, Atlanta, GA.
- 66. Zhang, Y., X. Li, D. Snow, D. Parker, and **Z. Zhou** (2013). "Intracellular and extracellular antimicrobial resistance genes in livestock manure management structures." *American Society for Microbiology 113th General Meeting*, Denver, CO.
- 67. Yi, X., W. Cheng, Q. Wei, and **Z. Zhou** (2013). "Correlation of metal concentrations and *erm* genes in urban soils." *American Society for Microbiology 113th General Meeting*, Denver, CO.
- 68. Yi, X., W. Cheng, Q. Wei, and **Z. Zhou** (2013). "Evaluation of antimicrobial resistance in urban environments in Singapore." *Microbial Ecology and Water Engineering Conference*, Ann Arbor, MI.
- 69. Wu, C., S. Nagarajan, H. Jing, and **Z. Zhou** (2013). "Correlations of methanogenic activities and environmental parameters in tropical mangrove sediments." *American Society for Microbiology* 113th General Meeting, Denver, CO.
- 70. Wei, Q., X. Yi, W. Cheng, and **Z. Zhou** (2013). "Occurrence and diversity of erythromycin resistance genes (*erm*) in urban soils." *American Society for Microbiology 113th General Meeting*, Denver, CO.
- 71. Wang, T., T.M. Lim, X. Yi, and **Z. Zhou** (2013). "Microbial regrowth in soils under selective pressure of various levels of erythromycin." *American Society for Microbiology 113th General Meeting*, Denver, CO.
- 72. Padhiary, M., S. Nagarajan, and **Z. Zhou** (2013). "Evaluation of efficiencies of microbial electrochemical systems (MXCs)." *American Society for Microbiology 113th General Meeting*, Denver, CO.
- 73. Nagarajan, S., C. Wu, H. Jing, S.K. Chou, and **Z. Zhou** (2013). "Diversity and abundance of ammonia-oxidizing Archaea in Singapore mangrove sediments." *American Society for Microbiology* 113th General Meeting, Denver, CO.

74. Liu, Y. and **Z. Zhou** (2013). "Development of a highly efficient photocatalytic fuel cell for simultaneous wastewater treatment and energy recovery of emerging contaminants." *International Water Association Water Reuse Conference*, Windhoek, Namibia.

- 75. Jing, H., X. Kong, and **Z. Zhou** (2013). "Diversity and antibiotic resistance of *Streptomyces* in tropical soils." *American Society for Microbiology 113th General Meeting*, Denver, CO.
- 76. Goyal, N., H. Widiastuti, I.A. Karimi, and **Z. Zhou** (2013). "Genome-scale metabolic network reconstruction and in silico analysis of Methanococcus maripaludis." *23rd European Symposium on Computer Aided Process Engineering*, Lappeenranta, Finland.
- 77. Chua, S.L., S. Nagarajan, S.K. Chou, M. Padhiary, and **Z. Zhou** (2013). "Evaluation of hydrogen production rates and uptake rates for microbial electrosynthesis of methane." *American Society for Microbiology 113th General Meeting*, Denver, CO.
- 78. Cheng, W., X. Yi, Q. Wei, and **Z. Zhou** (2013). "Correlation of antibiotic resistance and heavy metals in urban environmental soil samples." *American Society for Microbiology 113th General Meeting*, Denver, CO.
- 79. Yi, X., C. Lin, J.L.E. Ong, and **Z. Zhou** (2012). "Comparison of MLS_B antibiotic resistance among Gram-positive and Gram-negative bacteria in urban environments." *American Society for Microbiology 112th General Meeting*, San Francisco, CA.
- 80. Yi, X., C. Lin, J.L.E. Ong, and **Z. Zhou** (2012). "Environmental risk assessment of antimicrobial resistance in an urban environment." 21st Korea Advanced Institute of Science & Technology-Kyoto University-Nanyang Technological University-National University of Singapore Symposium, Kuala Lumpur, Malaysia.
- 81. Nagarajan, S., S.K. Chou, C. Wu, S. Cao, and **Z. Zhou** (2012). "Biomethane production potentials by methanogens for microbial electrosynthesis." *American Society for Microbiology 112th General Meeting*, San Francisco, CA.
- 82. Nagarajan, S., S.K. Chou, S. Cao, C. Wu, and **Z. Zhou** (2012). "An updated comprehensive techno-economic analysis of algae biodiesel." *5th International Conference on Industrial Bioprocesses*, Taipei, Taiwan.
- 83. Lin, C., X. Yi, X. Kong, J.L.E. Ong, X.Y.C. Chew, T. Wang, and **Z. Zhou** (2012). "Effects of human population densities on antimicrobial resistance in an urban environment." *Singapore International Water Weeks*, Singapore.
- 84. Lin, C., X. Kong, X. Yi, J.L.E. Ong, X.Y.C. Chew, T. Wang, and **Z. Zhou** (2012). "Correlation of anthropogenic pressure and antimicrobial resistance in urban environments." *American Society for Microbiology 112th General Meeting*, San Francisco, CA.
- 85. Kong, X., C. Lin, X. Yi, X.Y.C. Chew, and **Z. Zhou** (2012). "Quantification of minimum inhibition concentration and resistance levels of antimicrobials among *Streptomyces* in environmental samples." *American Society for Microbiology 112th General Meeting*, San Francisco, CA.
- 86. Auw, J.Q.M., X. Yi, and **Z. Zhou** (2012). "Comparison of double-labeled and single-labeled oligonucleotide probes for *in situ* quantification of *Streptomyces*." *American Society for Microbiology* 112th General Meeting, San Francisco, CA.
- 87. Amir, M.S.B., C. Wu, S. Nagarajan, S. Cao, X. Yi, and **Z. Zhou** (2012). "Development of novel 16S rRNA oligonucleotide probes to quantify methanogens." *American Society for Microbiology* 112th General Meeting, San Francisco, CA.
- 88. Amir, M.S.B., J.Q.M. Auw, S. Nagarajan, X. Yi, C. Wu, S. Cao, and **Z. Zhou** (2012). "Development of fluorescence *in situ* hybridization probes for the quantification of Archaea." *Singapore International Water Weeks*, Singapore.
- 89. **Zhou, Z.** and X.W. Wong (2011). "Low impact development techniques for sustainable environmental and water resources management." 4th American Society of Civil Engineering-

Environmental & Water Resources Institute International Perspective on Water Resources & the Environment, Singapore.

- 90. Yi, X., A. Christina, and **Z. Zhou** (2011). "Evaluation and design of fluorescence *in situ* hybridization probes for the quantification of *Streptomyces*." *Singapore International Water Weeks*, Singapore.
- 91. Ong, J.L.E., X. Yi, X.Y.C. Chew, T. Wang, and **Z. Zhou** (2011). "Evaluation of antimicrobial resistance at environmental samples in Singapore." *Singapore International Water Weeks*, Singapore.
- 92. Christina, A., **Z. Zhou**, X. Yi, and T. Wang (2011). "Development of a 16S rRNA-targeted probe for *Streptomyces*." *American Society for Microbiology 111th General Meeting*, New Orleans, LA.
- 93. Chew, X.Y.C., X. Yi, J.L.E. Ong, T. Wang, and **Z. Zhou** (2011). "Antimicrobial resistance among *Streptomyces* in natural soil samples." *American Society for Microbiology 111th General Meeting*, New Orleans, LA.
- 94. **Zhou, Z.**, A. Salveson, K. Bourgeous, and N. Fontaine (2010). "How different is different? The traps and pitfalls of applying statistics on system performance evaluation." *83rd Annual Water Environment Federation Technical Exhibition and Conference*, New Orleans, LA.
- 95. **Zhou, Z.**, L. Raskin, and J. Zilles (2010). "Optimization of cluster analysis for FISH image analysis." *American Society for Microbiology 110th General Meeting*, San Diego, CA.
- 96. Rauch-Williams, T., A. Salveson, B. Narayanan, **Z. Zhou**, J. Drewes, E. Dickenson, C. Higgins, K. Hyland, S. Snyder, B. Vanderford, D. Gerrity, M. Benotti, E. Snyder, and D. Drury (2010). "Trace organic compounds removal during wastewater treatment selection of a suite of indicator TOrC." 83rd Annual Water Environment Federation Technical Exhibition and Conference, New Orleans, LA.
- 97. **Zhou, Z.**, A. Salveson, B. Finney, R. Gearheart, and M. Burke (2009). "Cost capacity analysis and WAWTTAR model for small-scale water reuse." *24th Annual WateReuse Symposium*, Seattle, WA.
- 98. **Zhou, Z.**, A. Salveson, B. Finney, R. Gearheart, and M. Burke (2009). "Cost-effective technologies for small-scale water reuse." *California Water Environment Association Annual Conference*, Palm Springs, CA.
- 99. **Zhou, Z.**, A. Salveson, B. Finney, R. Gearheart, and M. Burke (2009). "Cost-effective technologies for small-scale water reclamation plants." *82nd Annual Water Environment Federation Technical Exhibition and Conference*, Orlando, FL.
- 100. **Zhou, Z.**, A. Salveson, B. Finney, and M. Burke (2009). "Cost-effective technologies for small-scale water reclamation plants (WRF 06-008)." *13th Annual Water Reuse & Desalination Research Conference*, Huntington Beach, CA.
- 101. **Zhou, Z.**, A. Salveson, J. Brown, J. Lopez, D. Sullivan, H. Breitenkam, R. Cisterna, E. Vadiveloo, R. Harris, S. Snyder, E. Snyder, and J. Drewes (2009). "Aquatic toxicology and removal of microconstituents through membrane processes." *American Water Works Association* 10th Biennial Membrane Technology Conference and Exposition, Memphis, TN.
- 102. **Zhou, Z.**, A. Salveson, J. Brown, J. Lopez, R. Cisterna, E. Vadiveloo, and H. Breitenkam (2009). "Advanced membrane treatment of wastewater and resulting aquatic impact of microconstituents in receiving waters." *California Water Environment Association Annual Conference*, Palm Springs, CA.
- 103. **Zhou, Z.**, A. Salveson, J. Brown, J. Lopez, R. Cisterna, E. Vadiveloo, and H. Breitenkam (2009). "Treatment of endocrine disruptors and pharmaceuticals through membrane processes." *American Membrane Technology Association 2009 Conference & Exposition*, Austin, TX.
- 104. **Zhou, Z.**, A. Salveson, J. Brown, J. Lopez, R. Cisterna, E. Vadiveloo, and H. Breitenkam (2009). "Evaluation of endocrine disrupting potentials in membrane effluents using aquatic

toxicity tests and fish bioassays." American Water Works Association Research Symposium, Austin, TX.

- 105. **Zhou, Z.**, A. Salveson, J. Brown, G. Juby, and S. Li (2009). "Pathogen and microconstituent removal using a non-biological treatment process." *WateReuse California Annual Conference*, San Francisco, CA.
- 106. Vadiveloo, E., R. Cisterna, R. Harris, H. Breitenkam, T. Greiner, P. Pitt, P. Vinci, and **Z. Zhou** (2009). "Identifying the feasibility of canal recharge for indirect potable reuse: the Plantation experience." *Florida Water Resources Conference*, Palm Beach County, FL.
- 107. Vadiveloo, E., R. Cisterna, H. Breitenkam, J. Lopez, R. Harris, T. Greiner, P. Pitt, K. Alexander, R. Latimer, P. Vinci, **Z. Zhou**, and A. Salveson (2009). "Identifying the feasibility of canal recharge for indirect potable reuse: the Plantation experience." 82nd Annual Water Environment Federation Technical Exhibition and Conference, Orlando, FL.
- 108. Alexander, K., R. Cisterna, E. Vadiveloo, A. Salveson, and **Z. Zhou** (2009). "Quantifying emerging contaminant removal with advanced water treatment in Arizona and Florida." *13th Annual Water Reuse & Desalination Research Conference*, Huntington Beach, CA.
- 109. **Zhou, Z.**, A. Salveson, B. Finney, R. Gearheart, and M. Burke (2008). "Low-cost treatment technologies for small-scale water reclamation plants (WateReuse Foundation 06-008)." *23rd Annual WateReuse Symposium*, Dallas, TX.
- 110. **Zhou, Z.**, A. Salveson, J. Brown, J. Lopez, D. Sullivan, H. Breitenkam, R. Cisterna, V. Enrique, R. Harris, S. Snyder, E. Snyder, and J. Drewes (2008). "Removal of microconstituents in an advanced water treatment facility and evaluation of potential water quality impact of discharged effluent to surface canals and groundwater." 81st Annual Water Environment Federation Technical Exhibition and Conference, Chicago, IL.
- 111. **Zhou, Z.**, A. Salveson, J. Brown, J. Lopez, R. Cisterna, E. Vadiveloo, and H. Breitenkam (2008). "Water quality through advanced wastewater treatment (AWT) facilities and recharge modeling (WaterReuse Research Foundation 06-019)." *23rd Annual WateReuse Symposium*, Dallas, TX.
- 112. **Zhou, Z.**, A. Salveson, J. Brown, and J. Lopez (2008). "Water quality through advanced wastewater treatment (AWT) facilities and recharge modeling (WateReuse Research Foundation 06-019)." *California Section Annual Conference*, Newport Beach, CA.
- 113. Poust, S., A. Salveson, **Z. Zhou**, J. Lopez, D. Sullivan, H. Breitenkam, R. Cisterna, E. Vadiveloo, R. Harris, J. Brown, S. Jain, M. Loinaz, and H. Joseph (2008). "Trace organics contaminant monitoring: removal, fate, and transport." *Water Quality Technology Conference and Exposition*, Cincinnati, OH.
- 114. Poust, S., A. Salveson, **Z. Zhou**, J. Lopez, D. Sullivan, H. Breitenkam, R. Cisterna, E. Vadiveloo, R. Harris, J. Brown, and S. Jain (2008). "Trace organics and advanced wastewater treatment plants: removal, transport, and toxicology." *Florida Water Resources Conference*, Tampa, FL.
- 115. **Zhou, Z.**, M. Robert, L. Raskin, and J. Zilles (2007). "Cumulative effects of land application of manure on levels of antimicrobials and antimicrobial resistant bacteria in soils." *American Society for Microbiology 107th General Meeting*, Toronto, Ontario, Canada.
- 116. Greeley, T., **Z. Zhou**, and J. Zilles (2007). "Comparing abundance of *Candidatus* Accumulibacter phosphatis and performance in a full-scale wastewater treatment plant's transition to enhanced biological phosphorus removal." *American Society for Microbiology 107th General Meeting*, Toronto, Ontario, Canada.
- 117. **Zhou, Z.**, M. Robert, L. Raskin, and J. Zilles (2006). "Quantification of MLS_B antimicrobial resistance in soil amended with swine wastes." *American Society for Microbiology 106th General Meeting*, Orlando, FL.

118. **Zhou, Z.**, M.N. Pons, L. Raskin, and J. Zilles (2005). "Automated image analysis for quantitative fluorescence *in situ* hybridization in environmental samples." *American Society for Microbiology 105th General Meeting*, Atlanta, GA.

- 119. **Zhou, Z.**, A. Jindal, M. Robert, L. Raskin, and J. Zilles (2005). "MLS_B resistance levels vary greatly for different populations in swine waste samples." *International Union of Microbiological Societies Meeting*, San Francisco, CA.
- 120. **Zhou, Z.**, A. Jindal, M. Wagoner, L. Raskin, and J. Zilles (2004). "FISH analysis of MLS_B antimicrobial resistance in swine waste." *American Society for Microbiology 104th General Meeting*, New Orleans, LA.
- 121. Yang, L., Y. Gu, and Z. Zhou (2001). "Research on biological regeneration of organoclay." 5th National Environmental Microbiological Symposium of Chinese Society of Microbiology, Nanjing, Jiangsu, China.
- 122. Yang, L., Y. Gu, and **Z. Zhou** (2001). "Investigation of high efficiency benzene degrading microbe." 5th National Environmental Microbiological Symposium of Chinese Society of Microbiology, Nanjing, Jiangsu, China.
- 123. **Zhou, Z.** and M. Zhang (1999). "Use of protozoan (*Tetrahymena pyriformis*) bioassay to evaluate the toxicity and mutation of pesticides." *Biennial Conference of Nanjing Society of Microbiology*, Nanjing, Jiangsu, China.

TECHNICAL REPORTS (4)

- 1. **Zhou, Z.** (2022). "Emerging contaminant removal and microbial growth in membrane filtration and activated carbon point-of-use systems." WQRF, Lisle, IL
- 2. Ji, Y., B. McCullouch, and **Z. Zhou** (2021). "Evaluation of our current and other available anti-icing/de-icing products under controlled environmental conditions to test effectiveness."
- 3. Salveson, A., **Z. Zhou**, B. Finney, M. Burke, and J.C. Ly (2010). "Low-cost technologies for small-scale water reclamation plants." Alexandria, VA, USA.
- 4. Salveson, A., J. Brown, and **Z. Zhou** (2010). "Monitoring microconstituents in an advanced wastewater treatment (AWT) facility and modeling discharge of reclaimed water to surface canals for indirect potable use." Alexandria, VA, USA.

INVITED PRESENTATIONS (38)

9/2024	Microbial solutions to environmental challenges	Purdue-Notre Dame Grate Lakes Science Workshop	West Lafayette, IN
4/2024	PFAS removal and microbial growth in membrane filtration and activated	Institute for a Sustainable Future, Purdue University	West Lafayette, IN
	carbon POU water filtration systems		
11/2023	Antibiotic resistance emergence, persistence, and	King Abdullah University of Science and Technology	Online
06/2023	Environmental Biotechnology Research at Purdue	Purdue Great Lakes Agencies Northwest Indiana Meeting	Portage, IN
04/2023	PFAS treatability by POU carbon and RO	2023 Water Quality Association (WQA) Convention & Exposition	Las Vegas, NV
04/2023	Retention of PFAS on Spent Treatment Media	-	Las Vegas, NV

03/2023	Emerging contaminant removal and microbial growth in membrane filtration and activated	Association of Environmental Engineering and Science Professors (AEESP) Research and Education Distinguished Lecture Conference	South Bend, IN
10/2022	carbon POU devices Emerging contaminant removal and microbial	WQRF - In the Know Webinar Series	Online
	growth in membrane filtration and activated carbon POU devices		
04/2022	Treatment and reuse of fertigation water	AeroFarms	Online
07/2021	Emerging contaminant removal and microbial growth in membrane filtration and activated carbon POU systems	2021 WQA Convention & Exposition	Las Vegas, NV
11/2019	Removal of emerging pollutants	International Scientific Congress on multiple barrier system for safe and healthy water preservation, Universidad Nacional de San Antonio Abad del Cusco (UNSAAC)	Cusco, Peru
11/2019	Nutrient control with wastewater treatment techniques	International Scientific Congress on multiple barrier system for safe and healthy water preservation, UNSAAC	Cusco, Peru
11/2019	Electrochemical filtration of antibiotics and antibiotic resistance genes	International Scientific Congress on multiple barrier system for safe and healthy water preservation, UNSAAC	Cusco, Peru
11/2019	Eutrophication and control of microbial growth	International Scientific Congress on multiple barrier system for safe and healthy water preservation, UNSAAC	Cusco, Peru
11/2019	Membrane filtration includin electrochemical carbon nanotubes and graphene filters	gInternational Scientific Congress on multiple barrier system for safe and healthy water preservation, UNSAAC	Cusco, Peru
11/2019	Elimination of pathogenic protozoa	International Scientific Congress on multiple barrier system for safe and healthy water preservation, UNSAAC	Cusco, Peru
11/2019	Point of use water filtration systems	International Scientific Congress on multiple barrier system for safe and healthy water preservation, UNSAAC	Cusco, Peru
11/2019	Techniques to control eutrophication	International Scientific Congress on multiple barrier system for safe and healthy water preservation, UNSAAC	Cusco, Peru
11/2019	Nanotechnology in the treatment of drinking water	International Scientific Congress on multiple barrier system for safe and healthy water preservation, UNSAAC	Cusco, Peru

11/2018	Antibiotic resistance in urban and natural environments	University of Notre Dame	South Bend, IN
10/2018	Water safety	Purdue Chapter of Engineers Without Borders	West Lafayette, IN
11/2017	Water	Guest lecturer in ENGR 103 (Global Engineering Practice & Design), Purduc University	West Lafayette, e IN
09/2017	Electrochemical carbon nanotube filters for water and wastewater treatment	The 20th Annual Indiana Pollution Prevention Conference and Trade Show	Indianapolis, v IN
11/2016	Water	Guest lecturer in Global Engineering Practice & Design, Purdue University	West Lafayette, IN
10/2016	Antibiotic resistance in urban and natural environments	Department of Biological Sciences, Purdue University,	Calumet, IN
06/2016	Antibiotic resistance in urban and natural environments	International Symposium of One Health: the Role of Microbe	Boston, MA
03/2016	Antibiotic resistance	Environmental Science Club, Purdue University	West Lafayette, IN
09/2014	Antimicrobials and antimicrobial resistance in natural and urban environments	Purdue Water Community Brown Bag Lunch Seminar Series	West Lafayette, IN
08/2013	Renewable methane production from carbon dioxide and water in a microbial electrosynthesis cel	Technical session "Sustainable Energy from Biomass and Wastewater" in the 15th Asian Chemical Congress	Singapore
06/2012	Electrode-driven anaerobic respiration for improved biofuel production	City University of Hong Kong–NUS Joint Seminar	Singapore
04/2012	Development of molecular biology techniques for the risk assessment of antibiotic resistance in environmental samples	Low-Carbon Forum of Urban and Regional Development, Peking University,	Shenzhen, China
02/2012	Evaluation of antimicrobial resistance at environmental samples	NUS-Peking University Scientific Workshop	Singapore
02/2012	Development of molecular microbiology tools for water quality monitoring	Singapore Ministry of Home Affairs– NUS Focus Group Meeting	Singapore
05/2011	· ·	NUS Industry Liaison Office-Siemens Joint Seminar	Singapore
11/2011		Singapore Economic Development Board–NUS Meeting on CO ₂ Conversion and Utilization Program,	Singapore
06/2010	Environmental sustainability: a microbiologist's perspective	University of Michigan-NUS Joint	Singapore

06/2010	Environmental risk assessment of macrolide- lincosamide-streptogramin B antimicrobial resistance	Michigan State University-NUS- Singapore Public Utilities Board Joint Seminar	Singapore
03/2010	Advanced membrane treatment of wastewater and resulting aquatic impact of microconstituents in receiving waters	Singapore Public Utilities Board	Singapore

VISITING SCHOLARS HOSTED (5)

<u> </u>	CIIC LINE II C	<u> </u>	
2022	Alam Zeb Khan	Degradation of pulp and paper wastewater	Quaid-I-Azam
		with fungal strains	University
2018	Dr. Lei Chen	Removal of pharmaceuticals and personal	Nanjing Forestry
		care products (PPCPs) in the	University, China
		electrochemical carbon nanomaterial filter	
2017-2019	Dr. Bolin Li	Development of Energy-efficient	Wuhan University of
		Wastewater Treatment Technologies	Technology, China
2015-2016	Dr. Cheng Liu	Development of Nanomaterials for	Hohai University,
		Wastewater Treatment	China
2014-2015	Dr. Shaohua Lin	Development of Nanomaterials for	Nanjing Forestry
		Wastewater Treatment	University, China

RESEARCH PERSONNEL MENTORED (121)

Postdocs (5)			
2013–2014	Dr. Laurence	Rapid and accurate quantification of antibiotic	NUS
	Glass-Haller	resistant bacteria and quantitative risk assessment	
		for water security	
2013–2014	Dr. Thai Hoang	Rapid and accurate quantification of antibiotic	NUS
	Le	resistant bacteria and quantitative risk assessment	
		for water security	
2013–2014	Dr. Yanbiao Liu	Development of electrochemical carbon nanotube	NUS
		filters to remove off-flavor compounds	
2012–2013	Dr. Hongmei Jing	gPhotosynthesis through electrode-driven anaerobio	NUS
		Respiration	
2011	Dr. Yiling Koh	Photosynthesis through electrode-driven anaerobio	NUS
		Respiration	
Dagaged Fe	animana (2)		
Research E	• • • •	D 11 1	NILIC
2014	Tianren Wang	Rapid and accurate quantification of antibiotic	NUS
		resistant bacteria and quantitative risk assessment	
2012 2014	77 ' 1 '	for water security	NILIO
2013–2014	Vaishnavi	Rapid and accurate quantification of antibiotic	NUS
	Sivachidambaram	resistant bacteria and quantitative risk assessment	
2011 2015	0 . 37	for water security	2 11 10
2011–2013	Sanjay Nagarajan	Photoelectrochemical water splitting for the	NUS
		production of value-added chemicals	

Ph.D. Studen	<u>nts</u> (13)		
	Yuxing (James)	Bioaccumulation and biosorption of PFAS and	Purdue
-	Jiang	their precursors	
2024–present	Young Jun Kim	Optimization of pilot-scale bioreactors through machine learning	Purdue
2023–present	Hongji Su	Wastewater treatment driven with artificial intelligence	Purdue
2023–present	Wangyu Hui	Emerging contaminant removal with electrochemical filters	Purdue
2022–present	Amanda Michelle Lopez	Cost-effective algal biofuel production with biomimicry techniques	Purdue
2021–present	1	Enhancing water access and health in drought- affected regions: A study on POU water treatment intervention	Purdue
2020-present	Sharon Hughes (co-chaired)	Techno-economic analysis of biofuel	Purdue
2016–present	Ejike Akobundu Ken-Opurum	Antibiotic resistance in POU water filtration systems	Purdue
2014–2019	Zhe Sun	Application of photochemical and biological approaches for cost-effective algal biofuel production	Purdue
2014–2019	Mian Wang	Development and removal of antibiotic resistance genes	Purdue
2011–2016	Chen Wu (co- chaired)	Molecular microbiology for improved biofuel production	NUS
2011–2016	Nishu Goyal (co-chaired)	Biochemical Conversion of Carbon Dioxide	NUS
2010–2015	Xinzhu Yi	Evaluation of antibiotic resistance at urban environments	NUS
Ph D. Studer	nts (incomplete)	(2)	
2014–2016	Sadia Jame	Electrochemical removal of chemical and	Purdue
		biological contaminants with nanomaterials	
2012–2017	Mrutyunjay Padhiary	Electrosynthesis of biofuels from carbon dioxide	NUS
Master's Stu	dents (thesis) (12		
2023–present	, , , ,	Algal biofuel	Purdue
2021–2023	Wanyue Hui	Manganese removal by activated carbon filters	Purdue
2021–2023	Rui Li	Arsenite removal by reverse osmosis membranes	Purdue
2021–2023	Qianyu	Electrochemical defluoridation	Purdue
	(Jonathan) Fan		
2019-2021	Hsin-Yin Yu	Emerging contaminant removal in POU devices	Purdue
2019-2021	Shreya Gupta	Emerging contaminant removal in POU devices	Purdue
2016-2018	Ran Chen	Antibiotic resistance in environmental samples	Purdue
2015–2017	Sol Park	DNA removal in carbon nano-tube filters	Purdue

07/2024			C v - Zhoi
2013–2014	Qing Xia	Phenol removal with electrochemical carbon nanotube filters coupled with <i>in situ</i> generated	NUS
2013–2014	Xiao Jin	H ₂ O ₂ Research on electrochemical carbon nanotube filters for bacterial and DNA removal	NUS
2012–2014	Tianren Wang	Evaluation of microbial regrowth after treatment of disinfectants or antimicrobials	NUS
2011–2013	Subhashini Kashinath	Utilization of landfill gases as renewable source of energy in India	NUS
Master's Stu	dents (non-thesis	(5)	
2024-present	: Haozhe Zheng	, , ,	Purdue
2021–2023	Mohammad Hass	an Chaudhry (co-chaired)	Purdue
2018-2019	Xiaoyi Peng		Purdue
2017-2019	Yi Ji		Purdue
2017-2019	Sacheev Mandhle		Purdue
2015–2017	Huanqi He		Purdue
Graduate In	dependent Study	Module Students (8)	
2023	Mohd Bilal Shadab	Water quality	Purdue
2023		Data science in biological wastewater treatment	Purdue
2022–2023	Mohammad Hassan Chaudhry	Measurement of Arsenite and Arsenate in Drinking Water	Purdue
2022	Hao Wu	Electrochemical Defluorination	Purdue
2019-2021	Lingjun Xu	Electro-Fenton treatment of organic contaminants	
2018-2019	Yiming Yang	Improvement of AOC measurements	Purdue
2016–2017	Wei Liu	Electrochemical water treatment	Purdue
2015–2016	Huanqi He	Electron-Fenton treatment of chemical contaminants	Purdue
<u>Undergradu</u>	ate Independent	Study Module Students (32)	
2024	Hadley Reese Thompson	Cost-effective biofuel production	EEE, Purdue
2023-2024	Kiefer Kettenis	Algal biofuel production	FYE, Purdue
2022	Giulio Pettenati	Microbial growth in POU systems	CE, Purdue
2022	Noah Blaustein	Microbial growth in POU systems	CE, Purdue
2021–2022	Ashley Lynn Sanchez Gonzalez	•	EEE, Purdue
2021–2022	Leyan Peng	AOC measurement in POU systems	EEE, Purdue
2021	Shreya Mullangi	Algal biofuel	CE, Purdue
2021	Preethi Goli	AOC measurement in POU systems	CS, Purdue
2020–2021	Sungmin Hong	Water quality measurement	EEE, Purdue
2020–2021	Benjamin E. Jolkovsky	POU filtration systems	EEE, Purdue
2020–2021	Chance Lehman	Algal virus for biofuel production	EEE, Purdue

			9. —
2020–2021	Hannah	AOC measurement in POU system	EEE, Purdue
2020 2021	Congleton	NE THE TENED	EEE D. 1
2020–2021	Sophie	Microbial growth in POU systems	EEE, Purdue
2020–2021	Mendelson Victoria Rose	PFAS removal in POU systems	EEE, Purdue
2020–2021	Pompeo	11713 telliovai ili 1 00 systems	EEE, I didde
2019–2020	Charles A.	PFAS treatment in POU filters	EEE, Purdue
_017 _0_0	Graham		, r araac
2019-2020	Yifei Bi	Metal removal in POU systems	EEE, Purdue
2017–2018	Benjamin M	Electrochemical water treatment	EEE, Purdue
	Stryker		
2017–2018	Shujun Zhou	Electrochemical water treatment	EEE, Purdue
2017–2018	Songhao Wu	Efficient biofuel production	EEE, Purdue
2016–2017	Tianlong Sun	Microbial electrosynthesis for biofuel production	EEE, Purdue
2016–2017	Jingfei Deng	Antibiotic resistant bacteria in the environment	EEE, Purdue
2015–2017	Luna Nguyen	Efficient production of biofuels from carbon dioxide	EEE, Purdue
2015–2016	Mingyu Zhang	Development of CNT electrochemical filter for water purification	EEE, Purdue
2015–2016	Leslie Yoo	Enhanced biofuel production from carbon dioxide	EEE, Purdue
2014-2015	Emily Traxler	Development and persistence of antibiotic	EEE, Purdue
	,	resistance	
2014-2015	Neil Perry	Enhanced biofuel production from carbon dioxide	EEE, Purdue
2014–2015	Ryan N Loveless	Development of graphene electrochemical filter	EEE, Purdue
	•	for water purification	
2014-2015	Haitian Liu	Enhanced biofuel production from carbon dioxide	EEE, Purdue
2014–2015	Yvonne Shi	Development of graphene electrochemical filter	EEE, Purdue
		for water purification	
2014–2015	Heyi Wang	Development of graphene electrochemical filter	EEE, Purdue
2011 2015	16:11" B	for water purification	EEE D. 1
2014–2015	Maithilee Das	Enhanced biofuel production from carbon dioxide	
2011–2012	Zhe Zhang	Bioremediation in marine oil spill	CE, NUS
Undergradu	ate Research Ass	istants (8)	
2023–2024	Oliver Shi	Thermodynamic analysis of viral infection of algae	Purdue
2019–2020	Kendall Cooper	Enhanced biological phosphorus removal	Purdue
2017 2020	Schwarz	Emiliareca prooprioras removar	1 didde
2016	Mustafa Reyad	Resource recovery and reuse from human urine	Purdue
	Ghuneim	,	
2015	Nathalia	Effects of lithium on the performance of	Purdue
	Delgadillo	anaerobic digesters	
	Ordoñez (co-		
	supervised)		
2013-2014	Wei Liang Tay	Design of FISH Probes to quantify linezolid	NUS
	. ·	Resistance	
2012–2013	Qing Wei	Genetic diversity of erythromycin resistance genes	NUS
		in soils in Singapore	
2011	Shenyan Cao	Biodiesel production of microalgae	NUS

09/2024 CV – Zhou Tianren Wang Evaluation of MLS_B antimicrobial resistance in 2010–2011 NUS environmental samples <u>Purdue Summer Undergraduate Research Fellowship (SURF) Students</u> (2) 2017 Benjamin M Electrochemical removal of metals using carbon Purdue Stryker nanotube filters 2015 Nathaniel Purdue Resource recovery and reuse from human urine Kallmyer (co-supervised) <u>U.S. Military Academy (West Point) Cadet's/Midshipmen Summer Program Students</u> (2) Joshua Hulgan 2016 Efficient production of biofuels from carbon Purdue dioxide 2016 Peter Zhu Efficient production of biofuels from carbon Purdue dioxide Final Year Industry Project Students from Singapore Republic Polytechnic (5) Jess Junhan Testing of linezolid resistance with FISH probes 2013 NUS Loong Xin Hui Soh 2013 Occurrence of antibiotic resistance genes in NUS environmental samples 2013 Yan Li Microbial regrowth after exposure to erythromycin NUS Testing of PKS primers with conventional PCR 2013 Chang Gao NUS 2013 Abizer Imran Optimization of hybridization conditions for PKS NUS primers Independent Work Program Students for U.S. DOE Solar Decathlon (4) 2012-2013 Xun Long Kew Development of a grey water filtration system CEE, NUS 2012-2013 Jason Hong Yang Development of a grey water filtration system CEE, NUS Tan 2012-2013 Miao He Development of a grey water filtration system CEE, NUS 2012-2013 Minghui Teo Development of a grey water filtration system CEE, NUS <u>Industrial Attachment Program (IAO) Students</u> (4) 2013 Elizabeth Ying Ping Wong CEE, NUS Erik Christianto CEE, NUS 2013 Hoang Linh Bui CEE, NUS 2013 2013 Khittisun Chaemdikawiwat CEE, NUS <u>Undergraduate Research Opportunities Program (UROP) Students</u> (1) 2012 Shenyan Cao Cost analysis of algae-based biofuel CEE, NUS <u>Undergraduate Final Year Project (Senior Thesis) Students</u> (15) 2013-2014 Development of electrochemical carbon nanotube NUS Yi Kong filters to remove off-flavor compounds 2013-2014 Dustin Juen HonDevelopment of electrochemical carbon nanotube NUS

filters to remove off-flavor compounds

Lee

2013–2014	Vidushini Siva	Optimization of methane production in a microbial electrolysis cell	NUS
2012–2013	Li Jie Hsien	Optimization of hydrogen production to support methanogenesis in a microbial electrolysis cell	NUS
2012–2013	Shang Long Chua	Theoretical and experimental evaluations of methane production in a microbial electrolysis cell	NUS
2012–2013	Wen Chao Cheng	Evaluation of antimicrobial resistance in environmental samples	NUS
2011–2012	Jin Quan Max Auw	Development of oligonucleotide probes for <i>in situ</i> quantification of <i>Streptomyces</i>	NUS
2011–2012	Yuanyan Du	Studies on 2-methylisoborneol- and geosmin- producing <i>Actinomycetes</i> in water catchment area	NUS
2011–2012	Xieheng Kong	Antimicrobial resistance of <i>Streptomyces</i> at environmental samples in Singapore	NUS
2011–2012	Chenghui Lin	Evaluation of MLS _B antimicrobial resistance in environmental samples	NUS
2011–2012	Mohammad Sair B Amir	i Development of FISH probes to quantify methanogens	NUS
2011–2012	Tianren Wang	Evaluation of microbial regrowth after treatment of disinfectants or antimicrobials	f NUS
2010–2011	Jie Li Eugene Ong	Evaluation of MLS _B antimicrobial resistance at environmental samples	NUS
2010–2011	Xin Yu Cynthia Chew	Evaluation of antibiotic-producing <i>Streptomyces</i> from soil samples	n NUS
2010–2011	Agnes Christina	<u> </u>	NUS

THESIS EXAMINATION AND DEFENSE COMMITTEE (94)

Ph.D	. Dissertation	Examination	Committee	(2.7)
111.10	· Disscration	Lammanon	Committee	\ <i>-</i>

2024	Nowrin Akter	Algal treatment of agricultural wastewater	ABE, Purdue
	Shaika		
2024	Jemuel S.	Optimization of aquaponics systems	ABE, Purdue
	Doctolero		
2022	Amit Chaturvedi	Development Of Efficient Transition Metallic	ChE, Indian
		Cathode Electrocatalyst for Application in Single	Institute of
		Chambered Microbial Fuel Cell	Technology
			Roorkee
2021	Xing Li	Phages as surrogates for pathogenic viruses in	CE, Purdue
		analysis and validation of UV disinfection of air	
		and surfaces	
2021	Jennifer A	Optimizing co-digestion of agro-industrial	ABE, Purdue
	Rackliffe	feedstocks and predicting feedstock renewable	
		energy potential via anaerobic digestion	
2021	Weerarathna	Development of novel molecular tools to study th	eCEE, NTU
	Vidanage Poorna	dynamics of individual SAR11 phylotypes in	
		microbial communities	
2019	Christian Ley	Biofilm detachment in plumbing systems	CE, Purdue

2018	Peng Chen	Improving nitrogen use efficiency in decoupled	ABE, Purdue
2018	Yi-Ju Wang	aquaponics system Nitrogen removal in sustainable aquaculture	Horticulture,
2010	0 1 5 5 1	production	Purdue
2018	Sarah E. Daly	Anaerobic digestion of dairy manure	ABE, Purdue
2017	Raymond RedCorn	Conversion of municipal organic waste into higher value acids and sugars	ABE, Purdue
2014	Chang Ding	Isolation and characterization of dehalogenators that detoxify polybrominated diphenyl ethers and chlorinated alkanes	CEE, NUS
2014	Khorshed Alam Akm	Removal of fluoride from water solution using innovative nanoscale sorbent	CEE, NUS
2014	Siok Ling Low	Microalgae cultivation using permeate from membrane bioreactor	CEE, NUS
2013	Nandar Kyaw	The study of ultraviolet based advanced oxidation process modeling – disinfection and oxidation for drinking water treatment	CEE, NUS
2013	Yujia Shen	Development of microbial electrochemical sensor for toxicity screening of influent wastewater	CEE, NUS
2013	Bijing Cai	Fouling propensity of secondary effluents in ultrafiltration membrane process	CEE, NUS
2013	Yue Ma	Formation and risks of disinfection by-products in ballast water chlorination process	CEE, NUS
2012	Shruti Pavagadhi	1	CEE, NUS
2012	Venketeswari Parida	Forward osmosis process for secondary effluent and seawater application	CEE, NUS
2012	Nichanan	Development of carbon nanotube-modified electrodes for microbial fuel cell application	CEE, NUS
2012	Xiaoying Zhu	Development of novel functionalized membranes for antifouling performances in water or wastewater treatment	CEE, NUS
2012	Betha Raghu	Physical, chemical, and toxicological characteristics of particulate emissions from stationary engine fueled with ultralow sulfur diesel and waste cooking oil derived biodiesel	CEE, NUS
2011	Jing Yu	Occurrence and fate of perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA) in water and wastewater and their removal using a	CEE, NUS
2011	Caian Fan	hybrid PAC-MBR system Influence of trace erythromycin and erythromycin- H ₂ O on microbial consortia in sequencing batch	CEE, NUS
2011	Thi Thai Yen Doan	reactors Enhanced lipid production of marine microalgae for biodiesel feedstock.	CEE, NUS
2010	Rajesh Kumar Balasubramanian	Heterogeneous catalysis of plant derived oils to	CEE, NUS

Ph.D. Comp	orehensive Qualif	ying Examination Committee (15)	
2013	Yang Yu	Arsenic removal from water by functional yttrium	CEE, NUS
		based adsorptive materials	
2013	Shamik	Development of novel graphene-based	CEE, NUS
	Chowdhury	nanocomposites for carbon dioxide capture and	
		storage	
2013	Le Wang	Novel MBR fouling control with quorum	CEE, NUS
		quenching	
2013	Tze Ying Wong	Fate and transport of perflouoroalkylsulfonates	CEE, NUS
		and perfluoro carboxylates in ambient air	
2012	Dandan Zhao	Arsenic adsorption	CEE, NUS
2012	Fengxue Xing	Biobutanol production from lignobiomass	CEE, NUS
2012	Daphane Tan	Fate and behavior of emerging organic	CEE, NUS
		contaminants from raw sewage in water	
		environment	
2012	Genevieve	Pathogens in recreational waters of Singapore	CEE, NUS
	Gabrielle Rose		
	Vergara		
2012	Yu Yan	Realization of direct biological butanol production	CEE, NUS
		from lignocellulosic biomass by wild-type	
		clostridium	
2011	Yun Wang	Quorum quenching as novel fouling control	CEE, NUS
		strategy for MBR fouling	
2011	Siyan Zhao	Reductive dechlorination of chloroform and	CEE, NUS
		identification of reductive dehalogenase genes	
2011	Yong Bin Phua	Rainwater harvesting and treatment system	CEE, NUS
2011	Govindaswamy	Assessment of air quality monitoring in urban	CEE, NUS
	Balaji	cities through switching of fuels	
2010	Yujia Shen	Development of microbial electrochemical sensor	CEE, NUS
		for toxicity screening of influent wastewater	
2010	Pei Xiong	Application of UVA/LED/TiO ₂ process for	CEE, NUS
		wastewater treatment-pharmaceutical degradation	
		and bacteria disinfection	
B1 B G 1	0 444 - 5		
	• •	ination Committee (27)	CEE NILIO
2014	Yang Yu	Arsenic removal from water by functional yttrium	CEE, NUS
2012	L 27.	based adsorptive materials	CEE NILIO
2013	Fengxue Xing	Biobutanol production from lignobiomass	CEE, NUS
2013	Yu Yan	Realization of direct biological butanol production	CEE, NUS
		from lignocellulosic biomass by wild-type	
2012	3.6.1	clostridium	ODE NILIO
2013	Mohammad	Microbial fuel cells (MFCS) for degradation of	CEE, NUS
	Sherafatmand	polycyclic aromatic hydrocarbons (PAHs) from the	e
2012	T 411 41	soil	CEE NILIO
2013	Jothinathan	O ₃ /H ₂ O ₂ based AOP for PPCPs removal: kinetic	CEE, NUS
	Lakshmi	studies on influence of initiator, promoter and	
		inhibitors in presence/absence of NOM/EFOM	

ŕ			
2013	Behdad	Removal of emerging contaminants using plant-	CEE, NUS
2013	Chehrenegar Wei Hong Fan	based system Tropospheric halocarbons in Southeast Asia-levels	s,CEE, NUS
		sources and delineation of regional and local-scale emissions	
2013	Genevieve Gabrielle Rose	Pathogens in recreational waters of Singapore	CEE, NUS
	Vergara		
2013	Yun Wang	Novel MBR fouling control with quorum	CEE, NUS
	<u> </u>	quenching	
2013	Mahsa Foolad	Fate and transport of sewage-associated indicators through soil column	CEE, NUS
2012	Siyan Zhao	Reductive dechlorination of chloroform and	CEE, NUS
		identification of reductive dehalogenase genes	
2012		Photocatalytic degradation of carbamazepine using	g CEE, NUS
2012	Initha	graphene-TiO ₂ nanocomposites	OPE NILIC
2012	Krishnan	Photocatalytic construction material for mitigation	CEE, NUS
2012	Padmaja Chenxi Sun	of air pollutants Inactivation kinetics and mechanism of indicator	CEE, NUS
2012	Chenai bun	and enteric viruses in tropical surface water	CLL, NOS
2012	Jinzhi Lim	Production of off-flavours and	CEE, NUS
	,	cylindrospermopsins by cyanobacteria in tropical	,
		aquatic ecosystems	
2012	Xueqing Shi	Treatment of pharmaceutical wastewater under	CEE, NUS
		anaerobic processes	
2012	Kai Yin Melvin	Development and application of a novel anaerobic	E CEE, NUS
	Tan	forward osmosis membrane bioreactor	
2011	Nan Li	(AnFOMBR) Versatile preparation of	CEE, NUS
2011	1 (411 1.11	ultrafiltration/nanofiltration membranes through a	,
		one-step simultaneous phase inversion and cross-	
		linking method for water treatment applications	
2011	Yuen Sean Lam	Novel syntrophic microbial consortium for the	CEE, NUS
		bioconversion of hemicellulose to value-added	
2011	D ' 17'	products	
2011	Pei Xiong	Application of UVA/LED/TiO ₂ process for	CEE, NUS
		wastewater treatment-pharmaceutical degradation and bacteria disinfection	
2011	Yu Ling	Heavy metal removal from water by using affinity	CEE NUS
2011	T tt Tanig	membrane	CLL, IVC
2011	Yujia Shen	Development of microbial electrochemical sensor	CEE, NUS
	,	for toxicity screening of influent wastewater	,
2011	Vasanth	Optimization of biochemical conversion process	CEE, NUS
	Natarajan	for lignocellulosic biomass to sugars by integrating	.
2010	A1 171 1 1	the kinetic models	CEE MILIO
2010	Akm Khorshed	Development of an innovative nano-scale sorbent for treatment of ionic contaminants in water	CEE, NUS
	Alam	solution	
		SOLULOII	

2010	Yue Ma	Formation and risks of disinfection by-products in	n CEE, NUS
2010	ol D'	ballast water chlorination process	000 3440
2010	Chang Ding	Isolation and characterization of dehalogenators that detoxify polybrominated diphenyl ethers and chlorinated alkanes	CEE, NUS
2010	Bijing Cai	Fouling propensity of secondary effluents in	CEE, NUS
		ultrafiltration membrane process	
M.S. Exam	ination Committe	e (thesis) (11)	
2020	Kush Paliwal	Analyzing the effects of flowing water on the	CE, Purdue
		detection and quantification of Salmon eDNA	,
2018	Tianqi Wang	Waste materials and management: lessons from the	eCE, Purdue
		Flint water crisis and blast furnace slag usage in	
		Indiana	
2017	Gaopin Cao	Formation and removal of toxic disinfection by-	EEE, Purdue
		products from cross-linked polyethylene pipes in	
2014	Line Dine	building premise plumbing system	CE Desides
2014	Ling Ding	Assessing the performance of antimicrobial	CE, Purdue
		concrete admixtures in concrete subjected to microbially induced corrosion	
2014	Zihan Wang	Reductive dehalogenation of chlorinated	CEE, NUS
2014	Ziliali Walig	hydrocarbons by established cocultures	CLL, IVOS
2012	Marc-Antoine	Bio-hydrogen & bio-butanol generation by bacters	iaCEE, NUS
	Metais	isolated from spent mushroom substrate	3,
2011	Zi Tan	Optimisation of microbial fuel cells	CEE, NUS
2011	Junyou Zhang	Forward osmosis membrane bioreactor for water	CEE, NUS
		reuse	
2011	Xue Feng	The effect of backwashing procedures on filter	CEE, NUS
		ripening and general effluent quality	
2011	_	Optimization of photobioreactor for astaxanthin	CEE, NUS
2010	Fung	production in Chlorella Zofingiensis	ODE NIIIO
2010	Sowpati Jayaker	Assessment of synergistic effect of UV/H ₂ O ₂	CEE, NUS
		integrated disinfection process	
M S Adviso	ory Committee (no	on-thesis) (14)	
2022–2024	Haozhe Zheng	(1 1)	EEE, Purdue
2021-2023	Shivani Cheernal	nalli Manjunath	EEE, Purdue
2021-2023	Chathura Viswan	,	CE, Purdue
2021-2023	Mohammad Hass	san Chaudhry	EEE, Purdue
2021-2023	Jamaie Scott	•	CE, Purdue
2021-2023	1	amuthu Krishnakumar	CE, Purdue
2021–2023	Sihan Zhou		CE, Purdue
2020-2022	Adedolapo Wasii	ı Adesope	CE, Purdue
2018–2019	Calvin Liu		CE, Purdue
2017–2018	Latha Bhat		CE, Purdue
2016–2018	Jesse Hamm		EEE, Purdue
2016–2018	Yifan Tong		EEE, Purdue
2016–2018	Wei Liu		EEE, Purdue

2016–2018	Yichen Wu			CE, Purdue
TEACHING	S EXPERIENCE			
2023	Lecturer	Design Principles and Practice of Drinking Water Systems	graduate	CE, Purdue
2022-present	Co-Lecturer	EEE Graduate Research Seminar	graduate	EEE, Purdue
2022	Lecturer	Biological Principles in Wastewater Treatment	graduate	Edx & Purdue
2022	Lecturer	Nutrient Removal and Resource Recovery in Wastewater	graduate	Edx & Purdue
2022	Lecturer	Modern Biotechnologies for Wastewater Treatment	graduate	Edx & Purdue
2021	Lecturer	Emerging Contaminant Removal	graduate	EEE, Purdue
2021	Co-Lecturer	Introduction to Engineering of Water	undergraduate	CE, Purdue
2019	Co-Lecturer	Nanotechnology for Civil Engineering	undergraduate	CE, Purdue
2018	Lecturer	Membranes for Water Treatment	graduate	EEE, Purdue
2016-2020	Co-Lecturer	Senior Design	undergraduate	EEE, Purdue
2016-2017	Co-Lecturer	Direct Potabilization	graduate	EEE, Purdue
2015-present	Lecturer	Environmental Biotechnology	graduate	CE, Purdue
2015–present	Lecturer	Wastewater Treatment	undergraduate	CE/EEE,
		Processes		Purdue
2014	Lecturer	Water and Wastewater Treatment	undergraduate	CE/EEE, Purdue
2012–2014	Lecturer	Topics in Environmental Biotechnology	graduate	CEE, NUS
2011–2014	Lecturer	Wastewater Microbiology	undergraduate	CEE, NUS
2010–2014	Co-lecturer	Environmental Engineering Principles	graduate	CEE, NUS
2010–2014	Coordinator and Resource Person	Design Project	undergraduate	CEE, NUS
2010–2012	Lecturer	Environmental Microbiological Principles	undergraduate	CEE, NUS
2007	Teaching Assistan	t Engineering Risk and Uncertainty	undergraduate	CEE, UIUC
2006	Teaching Assistan	t Environmental Engineering	undergraduate	CEE, UIUC
2006	Guest Lecturer	Biological Principles of Environmental Engineering Processes	graduate	CEE, UIUC
2005	Co-lecturer	Fluorescence <i>in situ</i> hybridization workshop	graduate	CEE, UIUC

SERVICE TO DEPARTMENT/UNIVERSITY				
2022–present	Co-Chair	University Senate Budget Interpretation, Evaluation and Review Committee	Purdue	
2022–present	Member	Graduate Committee	EEE, Purdue	
2022	Reviewer	Purdue Engineering Virtual Graduate Showcase	*	
		0 0	Engineering, Purdue	
2018-2021	Member	Academics Committee	EEE, Purdue	
2020	Reviewer	Most Outstanding Interdisciplinary Project	Graduate	
		Award (MOIPA)	School, Purdue	
2017	Reviewer	Ismail Travel Awards	Graduate	
			School, Purdue	
2017	Member	Internal Review Committee	CE, Purdue	
2017	Reviewer	Engineering Projects in Community Service (EPICS)	Purdue	
2016-2018	Member	Space/Facilities/Safety Committee	EEE, Purdue	
2016	Reviewer	Graduate School Fellowship	Purdue	
2016	Reviewer	Future Faculty Member Workshop	Purdue	
2015-2017	Judge	Office of Interdisciplinary Graduate Programs	Purdue	
		(OIGP) Spring Reception		
2015–2016	Member	Academics Committee	EEE, Purdue	
2015	Reviewer	Future Faculty Member Workshop	Purdue	
2014–2016	Executive	Purdue Water Community	Purdue	
	Committee			
	Member			
2014–2015	Member	Engagement Committee	EEE, Purdue	
2014–2015	Member	Seminar Committee	EEE, Purdue	
2014–2015	Member	Faculty Search Committee	EEE, Purdue	
2013–2014	Member	Student Affairs/Alumni Committee	CEE, NUS	
2013–2014	Member	Board of Examiners Committee	CEE, NUS	
2012–2013	Member	Engineering Accreditation Board Committee	CEE, NUS	
2012	Chairperson	Sessions "Efficient Systems for Safe Drinking	NUS-Peking	
		Water, Integrated Technology Based on	University	
		Reduce, Reuse, and Recycle (3R)" and "River	Scientific	
0040 0040		Ecological Rehabilitation"	Workshop	
2012, 2013	Interviewer	M. Eng. Student Admission Committee	CEE, NUS	
2011–2014	Member	Curriculum Committee	CEE, NUS	
2011, 2013	Interviewer	Ph.D. Student Admission Committee	CEE, NUS	
2011, 2012	Interviewer	Student Exchange Program Selection	CEE, NUS	
2011	Madama /	Committee	E 0. 1'	
2011	Moderator /	Energy Efficiency in Industrial Processes in	Energy Studies	
204.0	Track Lead	NUS-Industry Energy Efficiency Workshop	Institute, NUS	
2010	Judge	Environmental Science and Engineering Poster	CEE, NUS	
2004 2004	Valoratas	Symposium Conductor Statest Promiting Committee	CEE NILIC	
2004–2006	Volunteer	Graduate Student Recruiting Committee	CEE, NUS	
2003–2006	President	Gamma Alpha Graduate Society		

SERVICE 7	TO PROFESSION	
2024	Panelist	U.S. NSF
2024	Panelist	U.S. NSF
2023	Proposal Reviewer	Research Grants Council (RGC) of Hong Kong
2023	Panelist	U.S. NSF
2023	Panelist	ENG, CBET, U.S. NSF
2022	Panelist	ENG, CBET, U.S. NSF
2022	Proposal Reviewer	Research Grants Council of Hong Kong
2022	Panelist	ENG, CBET, U.S. NSF
2022	Panelist	U.S. NSF
2021	Proposal Reviewer	Nazarbayev University Research Council, Faculty-Development
	•	Competitive Research Grants Program, Kazakhstan
2021	Panelist	ENG, CBET, U.S. National Science Foundation
2021	Proposal Reviewer	Oak Ridge Associated Universities (ORAU) Ralph E Powe
	-	Junior Faculty Enhancement Awards
2021	Proposal Reviewer	RGC of Hong Kong
2020	Proposal Reviewer	The Antibiotic Resistance Programme, The Netherlands
		Organisation of Health, Research and Development (ZonMw)
2020	Proposal Reviewer	French National Research Agency / RGC of Hong Kong Joint
		Research Scheme (JRS)
2020	Proposal Reviewer	RGC of Hong Kong
2020	Panelist	U.S. NSF
2019	Proposal Reviewer	German-Israeli Water Technology Cooperation Program, Israeli
		Ministry of Science and Technology (MOST)
2019	Panelist	"Protecting Drinking Water" by Dr. Joan Rose, Purdue
		Engineering Distinguished Lecture Series
2019	Reviewer	Student Services Committee Academic Job Application Review,
		AEESP
2019	Panelist	ENG, CBET, U.S. NSF
2019		RGC of Hong Kong
2019	Panelist	U.S. NSF
2018	Proposal Reviewer	French National Research Agency / RGC of Hong Kong Joint
		Research Scheme (JRS)
2018	Panelist	ENG, CBET, U.S. NSF
2018	Proposal Reviewer	Research Grants Council of Hong Kong
2018	Panelist	U.S. NSF
2017	Panelist	ENG, CBET, U.S. NSF
2017	Proposal Reviewer	Ministry of Education and Science of the Russian Federation
2017	Proposal Reviewer	RGC of Hong Kong
2017–2020	Project Advisory	"Mitigating the Risk of Antibiotic Resistance at Critical Control
	Board Member	Points in the Beef Cattle Manure Management Systems", USDA
2016	-	RGC of Hong Kong
2016	Panelist	U.S. NSF
2016	Panelist	ENG, CBET, U.S. NSF
2016	Panelist	ENG, CBET, U.S. NSF
2016		Indiana Water Resources Research 104B Grant, USGS
2015	Panelist	ENG, CBET, U.S. NSF
2015	Proposal Reviewer	RGC of Hong Kong

2014	Reviewer	Student Services Committee Academic Job Application Review, AEESP
2014	Judge	Singapore Science & Engineering Fair, Singapore Ministry of
	, 0	Education, the Agency for Science, Technology & Research and
		the Science Centre Singapore
2013	Judge	Applied Materials Clean Tech Competition, Center for Science
	, 0	Teaching and Learning
2012-2014	Honorary Auditor	BioEnergy Society of Singapore
2012-2013	Workgroup	Guidelines for Treated Greywater Quality, Singapore Public
	Member	Utilities Board
2013	Proposal Reviewer	Ministry of Education and Science of the Russian Federation
2013	Proposal Reviewer	·
2012	Judge	Singapore Science & Engineering Fair, Singapore Ministry of
		Education, the Agency for Science, Technology & Research and
		the Science Centre Singapore
2010	Judge	Singapore Science Mentorship Program Youth Science
	, 0	Conference
2009-2010	Board Director /	Chinese American Environmental Professionals Association,
	Membership Chair	· Oakland, CA
2008-2012	Project Advisory	"Microbial Ecology of Drinking Water Distribution Systems",
	Committee	U.S. Water Research Foundation (formerly AwwaRF)
	Member	, ,

JOURNAL EDITOR

2022–present Review Editor	Frontiers in Microbiology - Microbiotechnology
2021-present Editorial Board	International Biodeterioration & Biodegradation
Member	
Handling Editor	Special issue of "Environmental Plastics" for journal PLOS
	ONE
2012–present Academic Editor	PLOS ONE

JOURNAL REVIEWER (321 manuscripts in 85 journals)

Journal	# of reviews
ACS Applied Materials & Interfaces	1
ACS Environmental Au	1
ACS ES&T Water	2
ACS ES&T Engineering	2
ACS Omega	1
American Journal of Infection Control	1
Applied Energy	3
Applied Microbiology and Biotechnology	3
AWWA Water Science	1
Biochemical Engineering Journal	6
Bioengineered	1
Biomass Conversion and Biorefinery	1
Bioresource Technology	16
Biotechnology for Biofuels	3
Bulletin of Environmental Contamination and Toxicology	2

09/2024	CV – Zho
Carbon	1
Chemical Engineering Journal	5
Chemosphere	1
Critical Reviews in Environmental Science and Technology	14
Current Opinion in Solid State & Materials Science	1
Desalination	1
Desalination and Water Treatment	1
Engineering	2
Environmental Chemistry	1
Environmental Engineering Science	9
Environment International	6
Environmental Microbiology Reports	2
Environmental Pollution	4
Environment Research	3
Environmental Science: Advances	2
Environmental Science and Pollution Research	1
Environmental Science and Ecotechnology	2
Environmental Science & Technology	45
Environmental Science & Technology Letters	2
Environmental Science: Nano	2
Environmental Science and Pollution Research	4
Environmental Science: Processes and Impacts	2
Environmental Science: Water Research & Technology	14
Environmental Technology	2
Food Chemistry	1
Frontiers in Microbiology	2
International Biodeterioration & Biodegradation	11
International Journal of Chemical Engineering	1
International Journal of Environmental Science and Technology	4
International Journal of Environmental Research and Public Health	1
JAC-Antimicrobial Resistance	1
Journal of Applied Microbiology	1
Journal of Bacteriology	1
Journal of Cleaner Production	7
Journal of Environmental Engineering	8
Journal of Environmental Quality	6
Journal of Hazardous Materials	17
Journal of Materials Chemistry A	1
Journal of Medical Microbiology	1
Journal of Oceanology and Limnology	1
Letter in Applied Microbiology	1
mLife	1
Marine Pollution Bulletin	1
Molecules	1
Microbial Cell Factories	3
Nanoscale	2
Nature Communications	1
npj Biofilms and Microbiomes	1
npj Diominis and Microbiomes	1

09/2024 CV – Zhou Pedosphere 1 PeerJ - Life & Environment 1 PLOS Global Public Health 1 PLOS ONE 3 Process Safety and Environmental Protection 1 Renewable Energy 11 RSC Advances 6 RSC Sustainability 1 Separation and Purification Technology 2 Science Advances 1 Science of the Total Environment 10 Scientific Reports 4 Smart Science 1 Soil Ecology Letters 1 Trends in Biotechnology 1 Urban Water Journal 1 Waste and Biomass Valorization 2 Water Emerging Contaminants & Nanoplastics 1 Water Environment Research 1 Water Research 22 2 Water Research X Water Science and Engineering 1

PROFESSIONAL MEMBERSHIPS

2011–present	Member	American Society of Civil Engineers (ASCE)
2011–present	Member	Association of Environmental Engineering and Science
		Professors (AEESP)
2004-present	Member	American Society for Microbiology (ASM)
2016–2018	Communication	The Overseas Chinese Society for Microbiology (Sino-
	Officer	Micro)
2012–2014	Member	BioEnergy Society of Singapore (BESS)
2011–2016	Member	International Water Association (IWA)
2008–2010	Member	American Water Works Association (AWWA)
2007–2010	Board Director /	Chinese American Environmental Professionals Association
	Membership Chair	(CAEPA)
2007-2010	Member	Water Environment Federation (WEF)