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EDUCATION:

Ph.D.	Civil Engineering (Environmental Discipline)	2006	University of Miami (Coral Gables, FL)
M.S.	Civil Engineering (Environmental Discipline)	2001	Tongji University (Shanghai, China)
B.S.	Civil Engineering (Water & Wastewater Engineering)	1998	Tongji University (Shanghai, China) (Ranked No.1 of 58 Undergraduates)
	Computer Science (Minor)	1998	Tongji University (Shanghai, China)

PROFESSIONAL REGISTRATIONS:

Professional Engineer (Florida, License No. 70917; since 2010)

RESEARCH INTERESTS:

Physicochemical Processes for Water Treatment/Water Reuse Green Urban Stormwater Treatment
 Aquatic Chemistry Sustainable Management of Landfill Leachate

PROFESSIONAL EXPERIENCE:

01/2014-present	Associate Professor	Dept. of Earth & Environmental Studies, Montclair State University, Montclair, NJ
09/2010-present	Doctoral Faculty	PhD Program in Environmental Management, Montclair State University, Montclair, NJ
09/2010-12/2013	Assistant Professor	Dept. of Earth & Environmental Studies, Montclair State University, Montclair, NJ
01/2008-08/2010	Assistant Professor	Dept. of Civil Engineering and Survey, University of Puerto Rico, Mayaguez, PR
08/2007-12/2007	Instructor	Dept. of Civil Engineering, Georgia Southern University, Statesboro, GA
08/2006-08/2007	Postdoctoral Associate	Dept. of Civil, Architectural & Environmental Engineering, University of Miami, FL
09/2006-12/2006	Instructor	Dept. of Civil, Architectural & Environmental Engineering, University of Miami, FL
08/2002-05/2006	Teaching Assistant	Dept. of Civil, Architectural & Environmental Engineering, University of Miami, FL
08/2001-08/2002	Water Engineer	Southwestern Architectural & Survey Institute, China

GRANTS:**As PI or Co-PI (External Grants) (Total: \$1,561,100)**

- Low-cost Adsorbent Coated (LAC) Wood Mulches for Mitigation of New Jersey Agricultural Stormwater Pollution (PI, \$75,000, **US Department of Agriculture (USDA) – Natural Resources Conservation Service**, 2016-2018)
- Toward Sustainable Urban Stormwater Management with New, Green Low-Cost Active Coating (LAC) Wood Mulch (PI, \$15,000, 13th Annual P3 Award - **US Environmental Protection Agency (EPA)**, 2016-2017)
- Biochar-Coated Mulches for Alleviation of Stormwater N for Healthy New Jersey Coastal Waters (PI, \$5,000, **New Jersey Sea Grant Consortium - Program Development Grant**, 2016-2017)
- MRI: Acquisition of an Inductively Coupled Plasma- Mass Spectrometry (ICP-MS) for Elemental Concentration and Speciation Analysis at Montclair State University (Co-PI, \$168,245, with Xiaona Li

- (PI), Stefanie Brachfeld, Sandra Passchier, and Dibs Sarkar (Co-PIs), **National Science Foundation**, 2015-2017)
- Development of a New, Effective and Low-cost Media for Sustainable Management of Polluted Road Stormwater in Highly Urbanized Areas (Co-PI, \$80,000, with Dr. Kirk Barrett (PI) at Manhattan College and Dr. Dibyendu Sarkar at MSU, **University Transportation Research Center**, 2015-2016)
 - A Green Technology for Nutrient and Metal Reduction in NJ Coastal Waters (Co-PI, \$140,000, with Dr. Dibyendu Sarkar (PI) at Montclair State University, Dr. Rupali Datta (Co-PI) at Michigan Tech, and Dr. Kirk Barrett (Co-PI) at Manhattan College, **New Jersey Sea Grant Consortium**, 2014-2016)
 - Approaches to Mitigation of Landfill Leachate-Induced UV Transmittance Impacts (PI, \$175,652, with Dr. Renzun Zhao (Co-PI) at Larmar University and Kevin Torrens at Brown and Caldwell, **Environmental Research and Education Foundation (EREF)**, 2014-2016)
 - Leachability of Emerging Solid Waste-derived Contaminants into Landfill Leachate (PI, ¥100,000 (equivalent to \$16,305)), **Chongqing University, Chongqing, China**, 2013-2015)
 - Low-cost, Green Technology to Improve Water Quality in Mining-Impacted Ecosystems, Phase I – Model Development and Optimization (Co-PI, \$199,946, with Drs. Samuel Ma (Joint-PI) at Texas A&M Univ., Dibyendu Sarkar (Joint-PI) at Montclair State Univ., and Rupali Datta (Co-PI) at Michigan Tech, Office of Surface Mining (OSM) Reclamation & Enforcement, US Department of the Interior, 2012-2014)
 - Remediation of Mixed Contaminated Plumes Using Ferrate (VI) (PI: \$344,286, with Dr. Dibyendu Sarkar, **DuPont Corp.**, 2012-2014)
 - Formation of Disinfection By-Products (DBPs) During Co-Treatment of Sewage and Landfill Leachate (PI, \$5,000, **New Jersey Water Environment Association (NJWEA)**, 2011-2012)
 - Scrap Tire and Water Treatment Residuals as Novel “Green” Sorbents for Removal of Common Metals from Polluted Urban Stormwater Runoff (PI, \$14,966, with Drs. Dibyendu Sarkar (Co-PI) and Sudipta Rakshit (Co-PI), **New Jersey Water Resources Research Institute (NJWRRI)**, 2011-2012)
 - Activation of Dioxygen with Bimetallic Zero-Valent Iron Nanoparticles for Remediating Organic and Arsenic Contaminated Groundwater (PI, \$200,000, **New Faculty Award through Puerto Rico - National Science Foundation (NSF)-EPSCoR Program**, 2009-2011)
 - Bio-Utilization of Coffee Processing Wastes (Co-PI, \$50,000; with Dr. Bo Hu at Univ. of Minnesota-Twin Cities, **U.S. Department of Agriculture**, 2009-10)
 - Comprehensive Bio-Utilization of Coffee Processing Wastes (Co-PI, \$71,700; with Dr. Bo Hu at Univ. of Minnesota-Twin Cities, **Bio Science and Engineering Initiative (BioSEI)**, 2009-2010)

As Advisor for My Students’ Research Awards (External Grants) (Total: \$20,000)

- Toward a greener water reuse technology with ferrate(VI) – phosphorus removal and recovery (\$5,000, Lei Zheng (PhD student), **New Jersey Water Resources Research Institute (NJWRRI)**, 2016-17)
- Developing a green technology to remove phosphate and pharmaceuticals from wastewater effluents (\$5,000, Saumik Panja (PhD student), **New Jersey Water Resources Research Institute (NJWRRI)**, 2015-16)
- Development of a new, effective and low-cost adsorption material to enhance Low Impact Development (LID) techniques for prevention of urban stormwater pollution in New Jersey (\$5,000, Hanieh Soleimanifar (PhD candidate), **New Jersey Water Resources Research Institute (NJWRRI)**, 2014-15)
- Developing an environment-friendly water reuse technology using Ferrate (VI) (\$5,000, Nanzhu Li (PhD candidate), **New Jersey Water Resources Research Institute (NJWRRI)**, 2013-2014)

As One of Multiple Co-PIs (External Grants)

- Nanotechnology from Basic Science to Emerging Applications: Institute for Functional Nanomaterials, (One of Multiple Co-PIs, **National Science Foundation, NSF-EPSCoR RII Track 1**, 5 years, from July 2010, \$24,000,000)

As PI or Co-PI (Internal Grants) (Total: \$113,290)

- Towards A Sustainable Direct Potable Reuse (DPR) Approach with Stormwater (PI, \$6,000, **MSU-PSEG Institute for Sustainability Studies**, with Dr. Pankaj Lal (Co-PI), 2016-2017)

- Laboratory-Scale Lysimeter Studies for Understanding of Temporal Leaching and Nature of Two Emerging Leachate Contaminants - UV-Quenching Substances and Dissolved Organic Nitrogen – During A Landfilling Cycle (PI, \$4,000, **Passaic River Institute Seed Grant for Environmental Research**, 2015-2016)
- Catalyzing a New USA-China International Research and Education Collaboration Using an Innovative and Green Water Treatment Technology (PI, \$2,000, **MSU-Global Education Grant**, 2014-2015)
- Towards Direct Potable Reuse (DPR) with a New, Low-Energy Treatment Solution (PI, \$4,000, **MSU-Career Development Fund**, 2014-2015)
- Performance and Mechanisms of Ferrate (Fe(VI)) Elimination of Algae for Drinking Water Purification (PI, \$4,000, **MSU- Summer Grant Proposal Development**, 2014-2015)
- Strengthening the International Collaboration Research Program on Solid Waste Management-Induced Water Pollution between Montclair State University and Chongqing University (PI, \$1,500, **MSU-Global Education Grant**, 2012-2013)
- A System Dynamic Study of Interaction Among Urbanization, Industrialization and Watershed Sustainable Development (Co-PI, \$78,790, **MSU-PSEG Institute for Sustainability Studies**, with Drs. Huan Feng (PI), Danlin Yu (Co-PI), and George Martin (Co-PI), 2011-2012)
- Catalyzing A New USA-China International Collaboration Research on Identification and Prevention of Water Contamination by Solid Waste Management (PI, \$2,500, **MSU-Global Education Grant**, 2011)
- Impact of Landfill Leachate in Formation of Disinfection By-Products (DBPs) in Wastewater Treatment (PI, \$3,500, **MSU- Summer Grant Proposal Development**, 2011-2012)
- A New Remediation Method to Remove Estrogens from Water: Sulfate Radical-Induced Advanced Oxidation Processes (SR-AOPs) (PI, \$2,000, **MSU- The Margaret And Herman Sokol Faculty/Student Research Grant**, 2011-2012)
- Fenton Treatment of High Strength Organic Wastewater: Effects of Inorganic Anions (PI, \$5,000, **College of Engineering at Univ. of Puerto Rico**, 2008-2009)

MAJOR RESEARCH COLLABORATORS:

Thomas Waite (Florida Tech), Satish Myneni (Princeton Univ.), Mark LeChevallier (American Water), Naiyun Gao (Tongji Univ., China), Weihua Song (Fudan Univ., China), Wenhai Chu (Tongji Univ., China), Renzun Zhao (Lamar Univ.), Nicole Fahrenfeld (Rutgers Univ.), Daphne Hermosilla (Universidad Complutense de Madrid, Spain), Ori Lahav (Israel Institute of Technology, Israel), Kevin Torrens (Brown and Caldwell, NJ), Tao Yan (Univ. of Hawaii), Samuel Ma (Texas A&M Univ.), Anthony Matarazzo (NJ American Water), Pengfei Zhang (The City College of New York – CUNY), Wen Zhang (New Jersey Institute of Technology), Kirk Barrett (Manhattan College), Ed Landa (USGS), James Englehardt (Univ. of Miami), Rupali Datta (Michigan Tech.), Xianlan Zeng (Chongqing Univ., China), Dibyendu Sarkar (Stevens Institute of Technology)

REPRESENTATIVE SERVICE:

- Judge for the Excellence in Environmental Engineering & Science Awards (American Academy of Environmental Engineers & Scientists)
- Advisory Board of The PSE&G Institute for Sustainability Studies
- Assessment Liaison of PhD Program in Environmental Management at MSU (2014-present)
- Member in Wetland Mitigation Council in the State of New Jersey (2012-2014)
- Session chair in the 28th International Conference on Solid Waste Technology, Philadelphia, Pennsylvania, March 2013 (Session: Landfill Leachate Treatment – Opportunity and Challenge)
- Panel review for US National Science Foundation (NSF)
- Doctoral Faculty at Montclair State University (2011 – present)

CURRENT MEMBERS IN MY RESEARCH GROUP:

Postdoc: Dr. Chanil Jung (01/2015 – now)
 Dr. Virinder Sidhu (05/2016-now)

PhD Students: Lei Zheng (2014-now), Hanieh Soleimanifar (2013-now), Nanzhu Li (2011 – now), Lisitai Yang (2016-now)

Visiting Professor: Dr. Yongmei Liang (Associate Prof., Sun Yat-sen Univ., 08/2016-now)
 Dr. Qingsong Liu (Assistant Prof., Chinese Univ. of Geosciences, 08/2016-now)
 Dr. Huiqin Zhang (Associate Prof., Hubei Univ. of Technology, 08/2016-now)

PREVIOUS MEMBERS IN MY RESEARCH GROUP:

Montclair State University:

Postdoc: Dr. Kawalpreet Kaur (Co-supervised with Dr. D. Sarkar, 09/2012-06/2013)
 Dr. Pravin Punamiya (Co-supervised with Dr. D. Sarkar, 09/2013-02/2016)

Visiting Professor: Dr. Dongyu Lv (Associate Prof., Lanzhou Univ., 01/2015-03/2016)
 Dr. Yali Song (Associate Prof., Zhejiang Univ. of Science & Technology, 01/14-01/2015)
 Dr. Liwei Xu (Associate Professor, Guilin University of Technology, 06-09/2014)
 Dr. Xin Huang (Associate Professor, Shanghai University, 10/2013-09/2014)
 Dr. Cuibai Chen (Associate Professor, Chinese University of Geosciences) (Co-supervised with Dr. Huan Feng, 09/2012-09/2013)

Master Student: Alicja Trzopek(2014-2015), Ciapha Morris (2012-2015), Christopher Gravesen (2012-2013) (Currently, GFZ German Research Center for Geosciences, Potsdam, Germany)
 Casey Ezyske (2010-2012, Department Honor Graduate Student; Currently Assistant Resource Management Specialist in New Jersey Highlands Council)

Undergraduate Student: Ashley DeGrandis (2011-2012) (Currently, Environmental Scientist at WCD Group)
 Maria Alejandra Castro (2013)

High School Students: Mariela Garcia, Precious Martinez, Jessica Yubi (2013, 2014, 2015 summer intern under the ACS SEED program; from Union City High School)
 Rayana Yarborough (2013 summer intern under the ACS SEED program; from Montclair High School)

University of Puerto Rico:

Master Student: Ivan Morales Parra (Current PhD Candidate at University of Rhode Island)
Undergraduate Student: Margarita Otero Diaz (Current PhD Candidate at University of Michigan);
 Marietta Marcano Gonzalez (Current Graduate Student at Univ. of Puerto Rico)
 Eidualberto Rosario Muniz (Currently, New Jersey Dept. of Transportation)

COURSES TAUGHT:

Over the past eight years, I have taught 14 courses in environmental engineering/science at undergraduate and graduate levels, including a laboratory course, at four U.S. universities.

No.	University	Year	Course Title	Level*
1	University of Miami	2006	Environmental Engineering Laboratory	U
2	Georgia Southern University	2007	Environmental Pollution	U
3			Water Supply & Sewer System	U
4	University of Puerto Rico	2008-10	Introduction to Environmental Engineering	U
5			Physicochemical Treatment of Water/Wastewater	G
6			Biological Wastewater Treatment	G
7			Water Treatment & Pollution Control	U
8			Environmental Engineering Chemistry	U
9	Montclair State University	2010-16	Earth & the Environment	U
10			Planet Earth	U
11			Research Literature	G
12			Environmental Geosciences	G
13			Environmental Remediation**	G
14			Water Treatment and Reuse**	G

* U – undergraduate level; G – graduate level

** I developed this course.

STUDENT EVALUATION:

University of Puerto Rico: Average, 4.70; Range, 4.12-4.89 (0.00- lowest; 5.00 – highest)

Montclair State University: Average, 1.46; Range, 1.20 - 2.10 (1.0 – highest; 4.0 – lowest)

COURSE DEVELOPMENT: Develop two graduate level courses at MSU – Environmental Remediation / Water Treatment and Reuse.

HONORS AND AWARDS:

- 2016, Keynote Speaker, Innovative Materials & Technologies for Environmental Sustainability Session, 252nd American Chemical Society (ACS) National Meeting & Exposition, Philadelphia, PA.
- 2016, US Environmental Protection Agency (EPA) People, Prosperity and the Planet (P3) Award
- 2016, Alumni Achievement Award (2001-2016) (School of Environmental Engineering and Science, Tongji University, Shanghai, China)
- 2016, Faculty Award for Excellence in Research, College of Science and Mathematics, MSU
- 2016, 1st Place in the 101st Annual New Jersey Water Environment Association (NJWEA) Conference – Student Poster Composition (as the advisor of Mr. Saumik Panja), Presentation Title: Potential Use of Vetiver Grass to Remove Ciprofloxacin from Aquatic Media.
- 2016, A co-authored paper entitled “Net-zero water management: achieving energy-positive municipal water supply” is highlighted in *Environmental Science: Water Research & Technology*
- 2015, Invited Speaker, Environmental Research and Education Foundation (EREF) Summit on Leachate Treatment Technologies, Philadelphia, PA
- 2014, Johnson A. Edosomwan Outstanding Publication Award, “Treatment of Landfill Leachate by the Fenton Process,” (with Dr. James Englehardt), *Water Research*, University of Miami College of Engineering
- 2014, Invited Attendee, NSF Capstone Net-Zero Water Design Workshop, Miami, FL
- 2013, Invited Speaker, Environmental Research and Education Foundation (EREF) Summit, Philadelphia, PA
- 2013, Invited Speaker, Dept. of Civil & Environmental Engineering, *New Jersey Institute of Technology*
- 2013, Invited Speaker, Dept. of Earth & Atmospheric Sciences, *City College of New York - CUNY*
- 2013, Invited Speaker, *Universidad Complutense de Madrid*, Spain
- 2012, Invited Speaker, *Chongqing Appraisal Center of Environment and Engineering*, Chongqing, China
- 2012, Invited Speaker, Dept. of Environmental Engineering, *Chongqing University*, China
- 2012, Invited Speaker, *Sanfeng Environmental Industry Co.*, Chongqing, China
- 2012, Invited Speaker, Dept. of Chemistry & Environmental Science, *New Jersey Institute of Technology*
- 2011, Invited Speaker, College of Environmental Science & Engineering, *Tongji University*, Shanghai, China
- 2011, Invited Speaker, *Southern Illinois University Carbondale*, Carbondale, IL
- 2011, Who’s Who in America
- 2011, Invited Speaker, Dept. of Environmental Engineering, *Chongqing University*, China
- 2010, Distinguished Professor, *University of Puerto Rico – Mayaguez*, PR
- 2009, Invited Speaker, The Institute for Functional Nanomaterials, *University of Puerto Rico – Río Piedras*, PR
- 2009, Invited Speaker, College of Environmental Science & Engineering, *Tongji University*, Shanghai, China
- 2005, the 1st Place, Citizens Board Research & Creativity Forum (presented research to faculty, and received the first place honor out of ca. 40 graduate student participants)
- 2002-2006, University Fellowship, University of Miami
- 2000-2002, Goldengate Award (No. 1 GPA among 25 master students), *Tongji University*
- 1999-2000, Guanghua Award (No. 1 GPA among 25 master students), *Tongji University*
- 1998, First-Class Award (No. 1 GPA among 58 undergraduates), *Tongji University*
- 1997, First-Class Award (No. 1 GPA among 58 undergraduates), *Tongji University*
- 1996, First-Class Award (No. 1 GPA among 58 undergraduates), *Tongji University*
- 1995, First-Class Award (No. 1 GPA among 58 undergraduates), *Tongji University*

MEMBERSHIPS:

- Association of Environmental Engineering and Science Professors (AEESP)
- American Chemical Society (ACS)
- American Water Works Association (AWWA)

Chinese-American Professors in Environmental Engineering and Science (CAPEES)
Society of Environmental Toxicology and Chemistry (SETAC)

PROPOSAL REVIEW:

National Science Foundation
National Geographic Society
Environmental Research and Education Foundation
Kentucky Science and Engineering Foundation
Puerto Rico Institutional Research Fund
Foundation for Polish Science

TEXTBOOK REVIEW:

John Wiley & Sons, Inc. (2010)

ACADEMIC JOURNAL REVIEWER:

Reviewed 200+ manuscripts for 57 journals, including:

- *Environmental Science & Technology*
- *Applied Catalysis B: Environmental*
- *Science of Total Environment*
- *Water Research*
- *Scientific Reports (Nature)*
- *Journal of Environmental Engineering-ASCE*
- *Chemosphere*
- *Waste Management*
- *Journal of Hazardous Materials*
- *Environmental Science: Water Research & Technology*
- *RSC Advances*
- *Environmental Engineering Science*
- *Nano Research*
- *Journal of Physical Chemistry*
- *Environmental Pollution*
- *Colloid and Surface A*
- *Separation Science and Technology*
- *Chemical Engineering Journal*
- *Plant Physiology and Biochemistry*
- *Desalination*
- *Environmental Technology*
- *Plant Physiology and Biochemistry*
- *Journal of Environmental Management*
- *Chemical and Biochemical Engineering Quarterly*
- *International Journal of Environmental Science & Technology*
- *Waste Management and Research*
- *CLEAN-Soil, Air and Water*
- *Expert Opinion on Environmental Biology*
- *Scientific Research and Essays*
- *Fresenius Environmental Bulletin*
- *Korean Journal of Chemical Engineering*
- *Desalination and Water Treatment*
- *Analyst*
- *Chemical Papers*

- *Frontiers of Environmental Science and Engineering*
- *Journal of Chemical Technology and Biotechnology*
- *Industrial & Engineering Chemistry Research*
- *PLOS ONE*
- *Practice Periodical of Hazardous, Toxic, and Radioactive Waste Management*
- *Waste and Biomass Valorization*
- *International Research Journal of Microbiology*
- *Environmental Engineering and Management Journal*
- *Journal of Electroanalytical Chemistry*
- *Environmental Science and Pollution Research*
- *American Chemical Science Journal*
- *Journal of Urban and Environmental Engineering*
- *African Journal of Environmental Science and Technology*
- *Chemical Engineering Communication*
- *Environmental Toxicology and Pharmacology*
- *International Journal of Environmental Analytical Chemistry*
- *Journal of Photochemistry and Photobiology A: Chemistry*
- *Sensors & Actuators: B. Chemical*
- *International Journal of Environment and Waste Management*
- *International Journal of Environment and Pollution*
- *Recent Patents on Engineering*
- *Applied Biochemistry and Biotechnology*
- *Water, Air and Soil Pollution*

BOOK CHAPTERS:

1. Li, N., Y. Deng, and D. Sarkar (accepted) **Ferrate(VI) Reaction With Effluent Organic Matter (EfOM) in Secondary Effluent for Water Reuse**, in *Ferrites and Ferrates: Chemistry and Applications in Sustainable Energy and Environmental Remediation*, by Virender Sharma (Editor), American Chemical Society (ACS) Symposium Series, ACS Publications.
2. Chu, W., N. Gao, Y. Deng, and Li, X. (2015) **Control of Halogenated N-DBP Precursors Using Traditional and Advanced Drinking Water Treatment Processes: A Pilot-Scale Study**, Chapter 17 in *Recent Advances in Disinfection By-Products*, by Tanju Karanfil, Bill Mitch, Paul Westerhoff, Yuefeng Xie (Editor), American Chemical Society (ACS) Symposium Series, 307-339, ACS Publications.
3. Y. Deng (2015). **Engineering in Environmental Management**, Chapter 6 in *An Integrated Approach to Environmental Management* by Dibyendu Sarkar, Rupali Datta, and Robyn Hannigan (Editors) (ISBN: 978-1-118-74435-2), 151-172, Wiley Publisher.
4. Ezyse, C., and Y. Deng (2012) **Landfill Management and Remediation Practices in New Jersey, United States**, Chapter 9 in *Management of Organic Waste* by Sunil Kumar and Ajay Bharti (Editors) (ISBN: 978-953-307-925-7), InTech Publisher.
5. Deng, Y. (2007) **Physicochemical Removal of Organic Contaminants in Municipal Landfill Leachate**, Chapter 1 in *Landfill Research Focus* by Ernest C. Lehmann (Editor) (ISBN: 1-60021-775-3), Nova Science Publishers, Inc..

PEER-REVIEWED ARTICLES:

1. Jung, C., Y. Deng, and T. Waite (under review) "Ferrate(VI) Decomposition in Water in the Presence of Natural Organic Matter (NOM)," *Water Research*.
2. Chen, C. B., and Y. Deng (under review) "Sulfate Radical – Induced Oxidation of Dissolved Organic Matters and Ammonia Nitrogen in Landfill Leachate," *Applied Catalysis B: Environmental*.
3. Deng, Y., C. Jung, R. Zhao, and K. Torrens (accepted) "Chemical Oxidation for Mitigation of UV-Quenching Substances (UVQS) from Municipal Landfill Leachate: Fenton Process versus Ozonation ," *Water Research*.
4. RoyChowdhury, A., D. Sarkar, D., Y. Deng, and R. Datta, R. (Accepted) "Assessment of soil and water contamination from acid mine drainage: A case study from Tab Simco coal mine," *Mine Water and the Environment*.
5. Huang, X., Y. Deng, S. Liu, Y. Song, N. Li, and J. Zhou (2016) "Formation of Bromate during Ferrate (VI) Oxidation of Bromide in Water," *Chemosphere*, 155, 528-533.
6. Soleimanifar, H, Y. Deng, L. Wu, and Sarkar D. (2016) "Water Treatment Residual (WTR)-Coated Wood Mulch for Mitigation of Toxic Metals and Phosphorus from Polluted Urban Stormwater Runoff," *Chemosphere*, 154, 289-292.
7. Deng, Y., C, Morris, D. Sarkar, S. Rakshit, and E. Landa, P. Punamiya (2016) "Water Treatment Residuals (WTRs) and Scrap Tire Rubber (STR) as Novel "Green" Sorbents for Removal of Common Metals from Polluted Urban Stormwater Runoff," *Water Environmental Research*, 88(6), 500-509.
8. Englehardt, J., T. Wu, F. Bloetscher, Y. Deng, P. du Pisani, S. Eilert, S. Elmir, T. Guo, J. Jacangelo, M. LeChevallier, H. Leverenz, E. Mancha, E. Plater-Zyberk, B. Sheikh, E. Steinle-Darling, and G. Tchobanoglous (2016) (Highlighted Paper) "Net-Zero Water Management: Implementation of Sustainable Energy-Positive Water Supply," *Environmental Science: Water Research & Technology*, 2016,2, 250-260.
9. Chu, W., T. Chu, E. Du, Y. Deng, Y. Guo, and N. Gao (2016). "Effects of UV/PS and UV/H₂O₂ Pre-oxidations on the Formation of Trihalomethanes and Haloacetonitriles during Chlorination and Chloramination of Free Amino Acids and Short Oligopeptides," *Chemical Engineering Journal*, 301, 65-72.
10. Chu, W., T. Chu, E. Du, Y. Deng, Y. Guo, and N. Gao (2016). "Increased Formation of Halomethanes during Chlorination of Chloramphenicol in Drinking Water by UV Irradiation, Persulfate Oxidation, and Combined UV/Persulfate pre-Treatments," *Ecotoxicology and Environmental Safety*, 124, 147-154.
11. Wei, X., N. Gao, C. Li, Y. Deng, S. Zhou, and L. Li (2016) "Zero-Valent Iron (ZVI) Activation of Persulfate (PS) for Oxidation of Bentazon in Water.," *Chemical Engineering Journal*, 285, 660-670.
12. Zheng, L., and Y. Deng (2016) "Settleability and Surface Characteristics of Ferrate(VI)-Induced Particles in Advanced Wastewater Treatment," *Water Research*, 93, 172-178.
13. Chu, W. H., X. Li, N. Gao, Y. Deng, Yin, D., Li, D., and T. Chu (2015) "Peptide Bonds Affect the Formation of Haloacetamides, an Emerging Class of N-DBPs in Drinking Water: Free Amino Acids versus Oligopeptides," *Scientific Reports (Nature)*, 5:14412.

14. Zhang, K., T. Zhang, Y. Deng, N. Gao, and Y. Yang (in press). "Occurrence of algae and algae-related taste and odour (T&O) compounds in the Qingcaosha Reservoir, China," *Journal of Water Supply: Research and Technology—AQUA*.
15. Song, Y., Y. Deng, and C. Jung (2016) "Mitigation and Degradation of Natural Organic Matters (NOMs) during Ferrate(VI) Application for Drinking Water Treatment," *Chemosphere*, 146, 145-153.
16. Deng, Y., and R. Zhao (2015) "Advanced Oxidation Processes (AOPs) in Wastewater Treatment," *Current Pollution Reports*, 1(3), 167-176.
17. Zeng, X., W. Ding, Z. Zhang, P. Wan, Y. Deng, and S. Wang (2015) "Effect of the Mixing Ratio during Co-Treatment of Landfill Leachate and Sewage with a Combined Stripping and Reversed A²/O Process," *Environmental Technology*, 36(20), 2668-2673 .
18. Liu, C., B. Wang, Y. Deng, J. Wang, W. Chen, and Y. Liu (2015) "M-PGMA as a New Water Treatment Agent to Remove Oxytetracycline from Water," *Water Science and Technology: Water Supply*, 134.
19. Liu, C., B. Wang, Y. Deng, J. Wang, W. Chen, B. Cui and S. He (2015) "Performance of a New Magnetic Chitosan Nano-particle to Remove Arsenic and Its Separation from Water," *Journal of Nanomaterials*.
20. Li, X., Y. Huang, C. Li, J. Shen, and Y. Deng (2015). "Degradation of pCNB by Fenton like process using α -FeOOH," *Chemical Engineering Journal*, 260, 28-36.
21. Song, Y., B. Dong, N. Gao, and Y. Deng, Y. (2015). "Comparative Evaluation of Aluminum Sulfate and Ferric Sulfate-Induced Coagulations as Pretreatment of Microfiltration for Treatment of Surface Water," *International Journal of Environmental Research and Public Health*, 12(6), 6700-6709.
22. Gao, Y. Q., N. Gao, Y. Deng, D. Yin, and Y. Zhang (2015). "Degradation of florfenicol in water by UV/Na₂S₂O₈ process," *Environmental Science and Pollution Research*, 22, 8693-8701.
23. Yin, D. D., N. Gao, L. Li, Y. Deng (2015) "Microcystin-RR Degradation by Ozonation," *Desalination and Water Treatment*, 55, 1060-1067
24. Tan, C., N. Gao, Y. Deng, J. Deng, S. Zhou, J. Li, and X. Xin (2014). "Radical induced degradation of acetaminophen with Fe₃O₄ magnetic nanoparticles as heterogeneous activator of peroxymonosulfate," *Journal of Hazardous Materials*, 276, 452-460.
25. Deng, J., Y. Shao, N. Gao, Y. Deng, C. Tan, and S. Zhou (2014). Zero-valent iron/persulfate (Fe⁰/PS) oxidation acetaminophen in water," *International Journal of Environmental Science and Technology*, 11(4), 881-890.
26. Gao, Y., N. Gao., Y. Deng, D. Yin, Y. Zhang, W. Rong, and S. Zhou (2014) 'Heat-activated persulfate oxidation of sulfamethoxazole in water,' *Desalination and Water Treatment*, 1-9.
27. Ou, H., C. Wei, Y. Deng and N. Gao (2014) "Principal component analysis to assess the efficiency and mechanism for ultraviolet-C/polyaluminum chloride enhanced coagulation of algae-laden water," *Water Science & Technology: Water Supply*, 14(3), 493-503.
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PRESENTATIONS AND POSTERS:

1. Deng, Y. (2016) "Low-cost Adsorbent Filter Media for Urban Stormwater Treatment," **Rutgers University**, Department of Civil and Environmental Engineering, Piscataway PA, November, 2016.
2. Deng, Y. (2016) "Toward Urban Water Sustainability with Innovative Water Treatment Technologies," **Temple University**, Department of Civil and Environmental Engineering, Philadelphia, PA, October, 2016.
3. Deng, Y. (2016) "Advancing the Art of Ferrate Chemistry for Water Treatment and Reuse," **Pennsylvania State University**, Department of Civil Engineering, Harrisburg, PA, October, 2016.
4. Deng, Y. (2016) "Engineering in Environmental Management," **Stevens Institute of Technology**, Department of Civil, Environmental and Ocean Engineering, Hoboken, NJ, October, 2016.
5. Deng, Y. (Keynote Speaker), C. Jung and T. Waite (2016) "Reevaluation of Ferrate(VI) Decomposition in Water with and without Natural Organic Matter (NOM)," **252nd American Chemical Society (ACS) National Meeting & Exposition in Philadelphia**, PA, USA, August, 2016
6. Deng, Y. (2015) "Ferrate-Induced Micro-particles during Ferrate(VI) Treatment of Secondary Effluent," **2015 International Chemical Congress of Pacific Basin Societies (Pacifichem 2015)**, Honolulu, Hawaii, USA.

7. Deng, Y., C. Jung and Y. Song (2015) "Ferrate(VI) Decay and Natural Organic Matter(NOM) Degradation during Potable Water Treatment," **Association of Environmental Engineering and Science Professor (AEESP) 2015 Conference**, New Haven, CT, USA, June, 2015.
8. Deng, Y., C. Jung, R. Zhao, and K. Torrens (2015) "Characterization of UV-Quenching Dissolved Organic Matters (DOM) in Landfill Leachate," **Association of Environmental Engineering and Science Professor (AEESP) 2015 Conference**, New Haven, CT, USA, June, 2015.
9. Jung, C., Y. Yoon, and Y. Deng (2015) "Competitive adsorption of selected NSAIDs on activated biochars: Experimental and molecular modeling study," **Association of Environmental Engineering and Science Professor (AEESP) 2015 Conference**, New Haven, CT, USA, June, 2015.
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11. Deng, Y., and N. Li (2015) "Ferrate(VI) as a New Water Treatment Agent for Wastewater Reuse," **New Jersey Water Environment Association (NJWEA) Annual Conference**, Atlantic City, NJ, USA, May, 2015.
12. Deng, Y. (2015) "Advancing the Art of Ferrate Chemistry for Drinking Water Treatment and Wastewater Reuse," **Sichuan University**, Chengdu, China, May, 2015.
13. RoyChowdhury, A., D. Sarkar, Y. Deng, and R. Datta (2015) "Green Remediation of Acid Mine Drainage Impacted Water Using an Industrial Byproduct: Filter-Column Study," **American Society of Mining and Reclamation National Meeting**, Lexington, KY, June, 2015.
14. RoyChowdhury, A., D. Sarkar, Y. Deng, and R. Datta (2015) "Soil and Water Quality in an AMD-Impacted Abandoned Mine site in Southern Illinois," **American Society of Mining and Reclamation National Meeting**, Lexington, KY, June, 2015.
15. RoyChowdhury, A., D. Sarkar, Y. Deng, and R. Datta (2015) "Soil and Water Quality in an AMD-Impacted Abandoned Mine site in Southern Illinois," **American Society of Mining and Reclamation National Meeting**, Lexington, KY, June, 2015.
16. Punamiya, P., Y. Deng, and D. Sarkar (2014) "Debromination of Tetrabromobisphenol A (TBBPA) with an Environmentally Friendly Oxidant - Ferrate (VI)," **2014 The Geological Society of America (GSA) Annual Meeting**, Vancouver, British Columbia, Canada, October, 2014.
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19. Huang, X., and Y. Deng (2014) "Bromate Formation during Ferrate (Fe(VI)) Oxidation of Bromide-containing Water," **2014 Annual Conference (ACE) - American Water Works Association**, Boston, MA, June 11, 2014.

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21. Deng, Y. (Invited Speaker) (2013) "New Sulfate Radical-based Advanced Oxidation Process (SR-AOP) for Treatment of Landfill Leachate," **Environmental Research and Education Foundation (EREF)'s Regional Summit on Leachate Treatment**, Philadelphia, Pennsylvania October 2013.
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25. Deng, Y. (2013) "Advanced Oxidation Processes for Removal of Pollutants in Landfill Leachate," **City College of New York - CUNY**, New York City, NY, March, 2013.
26. Deng, Y. (2013) "Advanced Oxidation Processes for Removal of Pollutants in Landfill Leachate," **Department of Civil Engineering, New Jersey Institute of Technology**, Newark, NJ, March, 2013.
27. Deng, Y. (2013) "Traditional and emerging Advanced Oxidation Processes (AOPs) for treatment of landfill leachate," **Department of Chemical Engineering, Universidad Complutense de Madrid**, Madrid, Spain, February 2013.
28. Chen, C., Y. Deng, and H. Feng (2013) "Sulfate Radical Oxidation of Refractory Organic Matters and Ammonia-Nitrogen in Mature Landfill Leachate," **The 28th International Conference on Solid Waste Technology**, Philadelphia, Pennsylvania, March 2013
29. Feng, F., D. Yu, Y. Deng, S. Zerbro III, B. Witherell, A. Trajkovska, M. Weinstein, G. Martin (2012) "Dynamic Interaction between Socio-Economic Development, and Watershed Sustainability," **2012 Passaic River Symposium - Today's Status, Tomorrow's Perspective**, Montclair, NJ.
30. Y. Deng and N. Li (2012) "Formation of Trihalomethanes (THMs) during Chlorination of Landfill Leachate", **The 2nd International Conference on Environmental Pollution and Remediation**, Montreal, Quebec, Canada, August 2012.
31. Y. Qian, S. Zerbro III, A. G. Piombino, D. Yu, Y. Deng, G. Martin, H. Feng (2012) "Causes of Impaired Rivers as a Function of Pollution Sources in Northern New Jersey Watersheds," **2012 Passaic River Symposium - Today's Status, Tomorrow's Perspective**, Montclair, NJ.
32. Gravesen, C., and Y. Deng (2012) "Ferrate Oxidation for Treatment of Landfill Leachate," **2012 Passaic River Symposium - Today's Status, Tomorrow's Perspective**, Montclair, NJ.
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