YANG DENG, PH.D., P.E.

University Distinguished Scholar
Professor of Environmental Engineering

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Montclair State University
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PROFESSIONAL HIGHLIGHTS:

Grants: over $2.5 millions
Publications: 133 (126 peer-reviewed articles, 2 non-reviewed publications, and 5 book chapters)
Citations: 8,200+ (Google Scholar as of October 2020)
h-index: 43 (Google Scholar as of October 2020)

EDUCATION:

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

PROFESSIONAL REGISTRATION:

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

RESEARCH INTERESTS:

Innovative Water Treatment and Reuse
Stormwater Treatment and Reuse
Advanced Oxidation Processes (AOPs) & Advanced Reduction Processes (ARPs) for Water Treatment
Municipal Landfill Leachate Management

PROFESSIONAL EXPERIENCE:

09/2020-present	University Distinguished Scholar	Montclair State University, Montclair, NJ
09/2018-present	Professor	Dept. of Earth & Environmental Studies, Montclair State University, Montclair, NJ
09/2014-08/2018	Associate Professor	Dept. of Earth & Environmental Studies, Montclair State University, Montclair, NJ
01/2017-08/2017	Visiting Fellow (sabbatical)	Dept. of Geosciences, Princeton University, Princeton, NJ (Host professor: Dr. Satish Myneni)
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
08/2001-08/2002	Water Engineer	Southwestern Architectural & Survey Institute, China

GRANTS:

As PI or Co-PI (External Grants) (Total: $2,399,086)

- Acquisition of a Triple Quadrupole LC/MS System for Enabling Education and Research Training in Safe Water for Food Production (PI, $150,000, **US Department of Agriculture(USDA) /National Institute of Food and Agriculture (NIFA)**, 2020-2021)
- U.S. - Egypt Science & Technology Visiting Lecture Series Travel Grant ($1,231, **United States Agency for International Development (USAID)** and **National Academy of Sciences (NAS)**, 2020)
- Towards Innovative and Green Water Reuse with Integrated Constructed Wetlands and Ferrate (VI) Treatment (U.S. PI, $349,543, with Hussein I. Abdel-Shafy (PI in Egypt), The U.S. - Egypt Science and Technology Joint Fund from **USAID** and **NAS**, 2019-22)
- MRI: Acquisition of a Dynamic Imaging Particle Analyzer for Characterization of Particulate Matters in Engineered and Natural Water Systems at Montclair State University (PI, $192,212, with Dr. Mei-Yin Wu (Co-PI), **National Science Foundation**, 2018-20)
- Green Teams: Creating a Process for Sustainable Technology Product Development (Co-PI, $30,000, with Amy Tuininga (PI), **VentureWell**, 2018-20)
- Toward Sustainable Urban Stormwater Management with New, Green, Low-Cost Active Coating (LAC) Wood Mulch – Phase II (PI, $75,000, 14th Annual P3 Award - **US Environmental Protection Agency (EPA)**, 2018-19)
- Developing a New, Compact, and Modular Design for Revolutionizing Urban Water Reuse (Joint-PI, $20,000, with Dr. Yong Yan (PI) at New Jersey Institute of Technology, **New Jersey Water Resources Research Institute**, 2018-19)
- Low-cost Adsorbent Coated (LAC) Wood Mulches for Mitigation of New Jersey Agricultural Stormwater Pollution (PI, $75,000, **USDA**, 2016-18)
- Leaching Risk and Potential Environmental Application of Sewage Sludge Derived Biochar in an Urban Environment (PI, $20,000, **The International Cooperation Program of Zhejiang Academy of Agricultural Sciences (China)**, with Dr. Xiaoyang Chen (Joint-PI), 2018-19)
- Toward Sustainable Urban Stormwater Management with New, Green, Low-Cost Active Coating (LAC) Wood Mulch – Phase I (PI, $15,000, 13th Annual P3 Award - **US EPA**, 2016-17)
- Biochar-Coated Mulches for Alleviation of Stormwater Nitrogen for Healthy New Jersey Coastal Waters (PI, $5,000, **New Jersey Sea Grant Consortium - Program Development Grant**, 2016-17)
- 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, and Sandra Passchier (Co-PIs), **NSF**, 2015-17)
- Approaches to Mitigation of Landfill Leachate-Induced UV Transmittance Impacts (PI, $175,652, with Dr. Renzun Zhao (Co-PI) at Lamar University and Kevin Torrens (Co-PI) at Brown and Caldwell, **Environmental Research and Education Foundation (EREF)**, 2014-16)
- 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 (Co-PI) at Stevens Institute of Technology, **University Transportation Research Center**, 2015-17)
- A Green Technology for Nutrient and Metal Reduction in New Jersey Coastal Waters (Co-PI, $140,000, with Dr. Dibyendu Sarkar (PI) at Stevens Institute of Technology, Dr. Rupali Datta (Co-PI) at Michigan Tech, and Dr. Kirk Barrett (Co-PI) at Manhattan College, **New Jersey Sea Grant Consortium**, 2014-16)
- Leachability of Emerging Solid Waste-derived Contaminants into Landfill Leachate (PI, $16,305, **International Cooperation Grant, Chongqing University, Chongqing, China**, 2013-15)

- 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 (PI) at Texas A&M Univ., Dibyendu Sarkar (Co-PI) at Stevens Institute of Technology, and Rupali Datta (Co-PI) at Michigan Tech, Office of Surface Mining Reclamation & Enforcement, **US Department of the Interior**, 2012-14)
- Remediation of Mixed Contaminated Plumes Using Ferrate (VI) (PI: $344,286, with Dr. Dibyendu Sarkar (Joint PI) at Stevens Institute of Technology, **DuPont Corp.**, 2012-14)
- Formation of Disinfection By-Products (DBPs) During Co-Treatment of Sewage and Landfill Leachate (PI, $5,000, **New Jersey Water Environment Association**, 2011-12)
- Scrap Tire and Water Treatment Residuals as Novel "Green" Sorbents for Removal of Common Metals from Polluted Urban Stormwater Runoff (PI, $14,966, **New Jersey Water Resources Research Institute**, 2011-12)
- Activation of Dioxygen with Bimetallic Zero-Valent Iron Nanoparticles for Remediating Organic and Arsenic Contaminated Groundwater (PI, $200,000, **NSF**, 2009-11)
- 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)**, 2009-10)

Group Students' Research Grants (External Grants; as Research Advisor) (Total: $25,000)

- Development of an Innovative and Resilient Emergency Water Treatment (EWT) for Natural Disasters ($5,000, Junkui Cui (PhD student), **New Jersey Water Resources Research Institute**, 2018-19)
- Toward a Greener Water Reuse Technology with Ferrate(VI) – Phosphorus Removal and Recovery ($5,000, Lei Zheng (PhD candidate), **New Jersey Water Resources Research Institute**, 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**, 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**, 2014-15)
- Developing an Environment-Friendly Water Reuse Technology Using Ferrate (VI) ($5,000, Nanzhu Li (PhD candidate), **New Jersey Water Resources Research Institute**, 2013-14)

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**, $24,000,000)

As PI or Co-PI (Internal Grants) (Total: $154,790)

- University Distinguished Scholar Award (AY2020-21) (a one-semester research leave)
- An Innovative Approach to Combating PFAS in Water (PI, $5,500, **MSU-Career Development Award**, 2019-20)
- Closing the Urban Water Cycle: Sewage Sludge-Derived Biochar (SSDB) for Urban Stormwater Management (PI, $30,000, **PSEG Institute for Sustainability Studies**, with Drs. Pankaj Lal and Jinshan Gao (Co-PIs), 2017-18)
- Lead Hazard in the Urban Areas of New Jersey: A Multidimensional Approach to Sustainable Risk Management (Co-PI, $6,000, **PSEG Institute for Sustainability Studies**, with Dr. Neeraj Vedwan (PI) and Pankaj Lal (Co-PI), 2017-18)
- Towards a Sustainable Direct Potable Reuse (DPR) Approach with Stormwater (PI, $6,000, **PSEG Institute for Sustainability Studies**, with Dr. Pankaj Lal (Co-PI), 2016-17)
- 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, 2015-16)
- 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**, 2014-15)

- Towards Direct Potable Reuse (DPR) with a New, Low-Energy Treatment Solution (PI, $4,000, **MSU-Career Development Award**, 2014-15)
- Performance and Mechanisms of Ferrate (Fe(VI)) Elimination of Algae for Drinking Water Purification (PI, $4,000, **MSU- Summer Grant Proposal Development**, 2014-15)
- 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**, 2012-13)
- A System Dynamic Study of Interaction among Urbanization, Industrialization, and Watershed Sustainable Development (Co-PI, $78,790, **PSEG Institute for Sustainability Studies**, with Drs. Huan Feng (PI), Danlin Yu (Co-PI), and George Martin (Co-PI), 2011-12)
- 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**, 2011-12)
- 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**, 2011-12)
- Fenton Treatment of High Strength Organic Wastewater: Effects of Inorganic Anions (PI, $5,000, **College of Engineering at Univ. of Puerto Rico**, 2008-09)

HONORS AND AWARDS:

2020, University Distinguished Scholar, MSU
2019, Superior Achievement Award, American Academy of Environmental Engineers & Scientists (AAEES)
2019, Top Reviewer Award from *Water Environment Research*
2019, Excellence in Review Award for the Journal *Frontiers of Environmental Science & Engineering*.
2018, Nanova Frontier Research Award (Chinese-American Professors in Environmental Engineering and Science (CAPEES) Society)
2017, US Environmental Protection Agency (EPA) People, Prosperity and the Planet (P3) (Phase II) Award
2017, Johnson A. Edosomwan Outstanding Publication Award, *Y. Deng and J. Englehardt (2007) "Electrochemical Oxidation for Landfill Leachate Treatment," Waste Management, 27(3), 380-388* (recognized as an outstanding paper in original research published within the prior 10 years in College of Engineering at University of Miami)
2016, Keynote Speaker, Innovative Materials & Technologies for Environmental Sustainability Session, the 252nd American Chemical Society (ACS) National Meeting & Exposition, Philadelphia, PA.
2016, US Environmental Protection Agency (EPA) People, Prosperity and the Planet (P3) (Phase I) Award
2016, Best Alumni Achievement Award Over the Past Fifteen Years (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, A co-authored Perspective Paper entitled "Net-zero Water Management: Achieving Energy-positive Municipal Water Supply" was 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, *Y. Deng and J. Englehardt (2006)"Treatment of Landfill Leachate by the Fenton Process," Water Research, 40 (20), 3683-3694* (recognized as an outstanding paper in original research published within the prior 10 years in College of Engineering at University of Miami)
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, Department of Chemical Engineering, *Universidad Complutense de Madrid*, Spain
2011, Invited Speaker, College of Environmental Science & Engineering, *Tongji University*, Shanghai, China
2011, Marquis Who's Who in America

2010, Distinguished Professor, Department of Civil Engineering, *University of Puerto Rico – Mayaguez* (the only award among 50+ Civil Engineering faculty)
2005, First Place, Citizens Board Research & Creativity Forum (presented research to faculty, and received the first-place honor out of 40+ graduate student participants)
2002-2006, University Fellowship, University of Miami
2000-2002, Goldengate Award (No. 1 GPA among 25 MS students in Municipal Eng.), *Tongji University*
1999-2000, Guanghua Award (No. 1 GPA among 25 MS students in Municipal Eng.), *Tongji University*
1998, Department Honors Graduate (GPA No. 1 among 58 department BS 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*

Awards of students under my mentorship

2020, Junkui Cui (PhD candidate), Kenneth S. Stoller Award ($1,500), New Jersey Water Environment Association (NJWEA)
2020, Junkui Cui (PhD candidate) Elmeryl Davies Memorial Scholarship ($3,000), New Jersey Licensed Site Remediation Professionals Association (LSRPA)
2019, Harshal Agrawal (summer high school researcher in my group under the Partner in Science Program of the Liberty Science Center): US EPA's Patrick H. Hurd Sustainability Award
2018, Junkui Cui (PhD student), Tracey G. Liberi Drinking Water Careers Memorial Scholarship ($5,000) from New Jersey American Water Works Association (AWWA)
2018, Harshal Agrawal: awarded the New Jersey Water Environment Federation/U.S. Stockholm Junior Water Prize Regional Award (the Gold Medal) in the Jersey City Medical Center STEM Showcase (County Science Fair), and selected for the 2018 Intel International Science and Engineering Fair.
2018, Arlin Henadez (2017 summer high school researcher in my group under the ACS SEED Program) won two Awards at the Regional Intel/ISEF known as the STEM Showcase: 1) National Oceanic and Atmospheric Administration (NOAA) Award; and 2) Bronze Medal in Environmental Science
2016, Saumik Panja, First Place in the 101st Annual New Jersey Water Environment Association (NJWEA) Conference – Student Poster Composition, Presentation Title: Potential Use of Vetiver Grass to Remove Ciprofloxacin from Aquatic Media.

REPRESENTATIVE SERVICE:

- Associate Editor, *Journal of Environmental Engineering – ASCE* (2019-present)
- Invited Papers Editor (North, Central, and South America), *Journal of Environmental Engineering – ASCE* (2020-present)
- Associate Editor, *Water Environment Research* (2019-present)
- Member in the Editorial Board of *Chemical Engineering Journal Advances* (2020-present)
- Member in the Editorial Board of *Journal Hazardous Materials* (2019-present)
- Member in the Editorial Board of *Journal of Environmental Engineering and Science* (Institution of Civil Engineers) (2020-present)
- Guest Editor (with Drs. V. Tarabara at Michigan State Univ., B. Li at Univ. of Connecticut, and M. Nadagouda at US EPA) for Special Collection on "Virus Monitoring and Removal in Natural and Built Systems," *Journal of Environmental Engineering - ASCE* (2020)
- MS Program Director in Earth and Environmental Science, MSU (2018-present)
- Co-host 2017-18, 2018-2019, 2019-2020 Association of Environmental Engineering & Science Professors (AEESP) Distinguished Lecture Series with New Jersey Institute of Technology, Princeton, Columbia, Rutgers, New York Univ., Stevens Institute of Technology, Drexel, Stony Brook, and Villanova Univ. etc.
- Member, University Sabbatical Review Committee (Montclair State University) (2019-2020)
- Member, Department Personnel Advisory Committee (Montclair State University) (2019-present)

- Member, Search Committee for the Dean of the College of Science and Mathematics (Montclair State University) (2017-2018)
- Judge for the Excellence in Environmental Engineering & Science Awards (American Academy of Environmental Engineers & Scientists) (2015, 2018)
- Doctoral Faculty at Montclair State University (2011 - present)
- Department Faculty Search Committee (2010-2011, 2017-2018)
- Chair, Department Instrumental Specialist Search Committee (2013-2014)
- College Facility Committee (2017-present)
- Advisory Board of the PSE&G Institute for Sustainability Studies (2015-present)
- Adviser, American Chemical Society (ACS) Project SEED program to supervise summer research for economically disadvantaged students (2013-present)
- Adviser, Partners in Science Program of the Liberty Science Center to supervise high school students' summer research (2015-present)
- Symposium chair in 2020 American Chemical Society National Meeting (Philadelphia, PA), March 2020 (Symposium: Advancing Chemical Oxidation & Reduction for Addressing Emerging Environmental Issues. With Drs. Weihua Song, Xiaohong Guan, and Judy Zhang)
- Symposium chair in the 256th American Chemical Society National Meeting (Boston, MA), August 2018 (Symposium: Water Reuse & Recycling: Innovative Solutions for Treatment & Implementation. With Dr. Tingting Wu)
- Symposium chair in the 254th American Chemical Society National Meeting (Washington, DC), August 2017 (Symposium: Advances in Chemical Oxidation for Water and Wastewater Treatment Systems. Co-chair: Dr. Weihua Song)
- Assessment Liaison of PhD Program in Environmental Management at MSU (2014-2016)
- Member, Wetland Mitigation Council in the New Jersey Department of Environmental Protection (NJDEP) (2012-2014)
- Symposium chair in the 28th International Conference on Solid Waste Technology, Philadelphia, Pennsylvania, March 2013 (Symposium: Landfill Leachate Treatment – Opportunity and Challenge)

CURRENT MEMBERS IN MY RESEARCH GROUP:

PhD Students:	Qiufeng Lin (2020-now; MS from Zhejiang Univ. (China)), Junkui Cui (2017-now; MS from Rutgers), Lisitai Yang (2016-now; MS from Penn State Univ.), Lei Zheng (2014-now; MS from New York Univ.),
MS Students:	Ali Albalgane (Fulbright Student, 2018-now)
Visiting Professor:	Dr. Xiaolan Zeng (12/2019-now; Chongqing Univ.)
Visiting Students:	Panpan Gao (02/2019-now; PhD student; China University of Geosciences) Ruonan Zhou (10/2019-now; MS student; Zhejiang Univ. of Technology)

PREVIOUS MEMBERS IN MY RESEARCH GROUP:

Montclair State University:

Postdoc:	Dr. Hanieh Soleimanifar (09/2018-12/2019; Current Postdoc at Dept. of Civil and Environmental Engineering at Univ. of Texas at San Antonio) Dr. Chanil Jung (01/2015 – 05/2017; Current Environmental Compliance Manager at LG Electronics, Englewood Cliff, New Jersey) Dr. Virinder Sidhu (05/2016-03/2017; Current Postdoc Associate in Civil Engineering Department at Stevens Institute of Technology) Dr. Pravin Punamiya (Co-supervised with Dr. D. Sarkar, 09/2013-02/2016; Current Project Engineer at Parsons Corp./DuPont Site Representative) Dr. Kawalpreet Kaur (Co-supervised with Dr. D. Sarkar, 09/2012-06/2013; Current Environmental Scientist at Langan Eng. & Environ. Services)
Visiting Professor:	Linyong Li (02/2018-02/2019) (Zhejiang Institute of Communication, China) Fanlin Meng (Chief Engineer, Chengde Water Supply Company, China, 08/2016-now)

Dr. Yongmei Liang (Associate Prof., Sun Yat-sen Univ., 08/2016-08/2017)
Dr. Qingsong Liu (Assistant Prof., Chinese Univ. of Geosciences, 08/2016-08/2017)
Dr. Huiqin Zhang (Associate Prof., Hubei Univ. of Technology, 08/2016-08/2017)
Dr. Xiaoyang Chen (Associate Prof., Zhejiang Academy of Agricultural Sciences, 08/2016-08/2017)
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)

PhD Student: Hanieh Soleimanifar (2013-2018; MSU Doctoral Research Recognition of Excellence)
Nanzhu Li (2011-2016; Current Environmental Scientist at BEM Systems, Inc.)

MS Student: Alicja Trzopek (2014-2015, Department Honors Graduate Student, Current Project Manager at Peak Environmental LLC), Ciapha Morris (2012-2015, Current Field Inspector at ANS Geo), Christopher Gravesen (2012- 2013) (GFZ German Research Center for Geosciences, Potsdam, Germany); Casey Ezyske (2010-2012, Department Honors Graduate Student; Current Natural Resource Specialist in New Jersey Highlands Council)

Undergraduate Student: Ashley DeGrandis (2011-2012) (Current Project Manager at WCD Group, LLC.)
Maria Alejandra Castro (2013)

Visiting Student: Renee Turner (2017 summer), Civil Engineering undergraduate from Villanova Univ.

High School Students: 2019: Yemi Mendoza (Union City High School, Union City, NJ) (under the support of ACS SEED Program)
2018: Arlin Hernandez, Yemi Mendoza (Union City High School, Union City, NJ) (under the support of ACS SEED Program)
2017: Arlin Hernandez (Union City High School, Union City, NJ) (under the support of ACS SEED Program), Harshal Agrawal (Dr. Ronald E. McNair Academic High School, Jersey City, NJ) (under the support of the Liberty Science Center)
2016: Keileen Alvarez, Arlin Hernandez (Union City High School, Union City, NJ) (under the support of ACS SEED Program)
2015: Jessica Yubi (Union City High School, Union City, NJ) (under the support of ACS SEED Program)
2014: Mariela Garcia, Jessica Yubi (Union City High School, Union City, NJ) (under the support of ACS SEED Program)
2013: Mariela Garcia, Precious Martinez (Union City High School, Union City, NJ), Rayana Yarborough (Montclair High School, Montclair, NJ) (under the support of ACS SEED Program),

University of Puerto Rico:

MS Student: Ivan Morales Parra (Current Environmental Analyst in Massachusetts Department of Environmental Protection)

Undergraduate Student: Margarita Otero Diaz (Current Assistant Professor at Humboldt State University); Marietta Marcano Gonzalez (Current PhD Student at Univ. of Puerto Rico); Edualberto Rosario Muniz (Current Engineer in Maryland State Highway Administration)

MEMBERSHIPS:

Association of Environmental Engineering and Science Professors (AEESP)

International Water Association (IWA)
American Society of Civil Engineers (ASCE)
Water Environment Federation (WEF)
Chinese-American Professors in Environmental Engineering and Science (CAPEES)
American Water Works Association (AWWA)
American Chemical Society (ACS)

COURSES TAUGHT:

Over the past eleven 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	2010-20	Earth and 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
15			Honors Seminar in Science: Water***	U

* U – undergraduate level; G – graduate level; ** A new course that I developed;
*** An Honors Program course that I lead three department professors to co-teach.

STUDENT EVALUATION:

University of Puerto Rico: Average, 4.70 (0.00- lowest; 5.00 – highest)
Montclair State University: Average, 1.46 (1.0 – highest; 4.0 – lowest)

COURSE DEVELOPMENT:

Develop two graduate level courses at MSU – *Environmental Remediation*; and *Water Treatment and Reuse*

TEXTBOOK REVIEW:

Reviewed an undergraduate level textbook on water & wastewater treatment for John Wiley & Sons, Inc. (2010)

ACADEMIC JOURNAL REVIEWER:

Reviewed 300+ manuscripts for 62 journals, including:

- *Water Research*
- *Chemical Engineering Journal*
- *Journal of Hazardous Materials*
- *Applied Catalysis B: Environmental*

- *Science of Total Environment*
- *Environmental Science & Technology*
- *Scientific Reports*
- *Critical Reviews in Environmental Science & Technology*
- *Environmental Science: Water Research & Technology*
- *Journal of Environmental Engineering-ASCE*
- *Chemosphere*
- *Waste Management*
- *RSC Advances*
- *Environmental Engineering Science*
- *Nano Research*
- *Journal of Physical Chemistry*
- *Environmental Pollution*
- *Colloid and Surface A*
- *Separation Science and Technology*
- *Journal of Environmental Management*
- *Plant Physiology and Biochemistry*
- *Desalination*
- *Environmental Technology*
- *Ultrasonics Chemistry*
- *Reaction Chemistry & Engineering*
- *Chemical Engineering Communication*
- *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*
- *Journal of Chemical Environmental Engineering*
- *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 Volarization*
- *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*
- *Journal of the Taiwan Institute of Chemical Engineers*

PUBLICATIONS (NON-REVIEWED ARTICLES, PEER-REVIEWED ARTICLES, AND BOOK CHAPTERS) (*Citation No. in Google Scholar* – **8,200+** until 10/2020; h-index = **43**):

NON-REVIEWED ARTICLES:

1. Deng, Y. (2020) "Editorial: Surmounting Challenges in Natural and Engineered Water Systems," ***Water Environment Research***, 92(8).

2. Deng, Y., B. Li, M. Nadagouda, V. Tarabara (2020) "Editorial for the ASCE Journal of Environmental Engineering Special Collection - virus monitoring and removal in natural and built systems," ***Journal of Environmental Engineering- ASCE***, Special Collection - virus monitoring and removal in natural and built systems, 01820001.

PEER-REVIEWED ARTICLES:

1. Deng, Y. (under review) "Reusing Water Industrial Wastes for Closing an Urban Water Cycle," ***Nature Sustainability***.

2. Chu, W., C. Fang, Y. Deng, and Z. Xu (accepted) (Viewpoint) "Intensified Disinfection amid COVID-19 Pandemic Poses Potential Risks to Water Quality and Safety," ***Environmental Science & Technology***.

3. Zheng, L., H. Feng, Y. Liu, J. Gao, D. Sarkar, and *Y. Deng* (accepted) "Chemically Enhanced Primary Treatment of Municipal Wastewater with Ferrate(VI)"

4. Sidhu, V., K. Barrett, D. Y. Park, Y. Deng, R. Datta, and D. Sarkar (accepted) "Wood Mulch Coated with Iron-based Water Treatment Residuals for the Abatement of Metals and Phosphorus in Simulated Stormwater Runoff ," ***Environmental Technology & Innovation***.

5. Dong, F., Q. Lin, C. Li, G. He, and Y. Deng (2021) "Impacts of Pre-oxidation on the Formation of Disinfection Byproducts from Algal Organic Matter in Subsequent Chlor(am)ination: A review," ***Science of The Total Environment***, 754, 141955.

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