TEXAS STATE VITA

I. Academic/Professional Background

A. Name and Title

Name: Dr. Keisuke Ikehata Title: Associate Professor

B. Educational Background

Degree	*Year*	*University*	*Major*	*Thesis/Dissertation*
PHD	2003	University of Alberta	Civil and Environmental Engineering	Production, Characterisation and Evaluation of Coprinus Peroxidase for Phenolic Wastewater Treatment
MENG	1999	McGill University	Civil Engineering	Characterisation of Tyrosinase for the Treatment of Aqueous Phenols

C. University Experience

Position	*University*	*Dates*
Associate Professor, Ingram School of Engineering	Texas State University. San Marcos, TX, United States	September 1, 2025 - Present
Assistant Professor, Ingram School of Engineering	Texas State University. San Marcos, TX, United States	July 1, 2019 - August 31, 2025
Adjunct Professor/ Lecturer, Department of Chemical and Environmental Engineering	University of California, Riverside. Riverside, CA, United States	April 2018 - June 2019
Lecturer, Department of Chemistry and Biochemistry	California State University, Fullerton. Fullerton, CA, United States	August 2018 - May 2019
Research Associate, Department of Civil and Environmental Engineering	University of Alberta.	December 2006 - October 2009

Position	*University*	*Dates*
	Edmonton, Alberta, Canada	
Sessional Lecturer, Department of Civil and Environmental Engineering	University of Alberta. Edmonton, Canada	January 2006 - April 2007

D. Relevant Professional Experience

Position	*Entity*	*Dates*
Owner/Consultant	Jeux d'eau Knowledge and Innovation, New Braunfels, TX	March 2018 - Present
R&D Manager/ Technical Specialist	Pacific Advanced Civil Engineering	December 2009 - March 2018

E. Other Professional Credentials (licensure, certification, etc.)

Professional Engineer (Environmental), Arizona Board of Technical Registration. (January 22, 2013 - Present). License Number: 54466.

Professional Engineer (Environmental), Association of Professional Engineers, Geologists and Geophysicists of Alberta. (August 24, 2011 - Present). License Number: 87949.

II. TEACHING

B. Courses Taught:

Texas State University:

BIO 4299 - UNDERGRAD RES

BIO 5114 - RESEARCH EXPER

BIO 5199B - THESIS

BIO 5299B - THESIS

BIO 5399A - THESIS

BIO 7114 - RESEARCH EXPER

BIO 7214 - RESEARCH EXPER

BIO 7303 - RESEARCH

BIO 7314 - RESEARCH EXPER

CE 3320 - ENVIRONMENTAL ENGINEERING

CE 4323 - PHYS & CHEM TREATMENT OF WATER

CE 4323 - PHYS AND CHEM TREAT WT

CE 5320 - WATER QUALITY MANAGEMENT

CHEM 7330 - ENVIRONMENTAL CHEM

ENGR 5105 - ENGINEERING INTERNSHIP

ENGR 5199B - THESIS

ENGR 5299B - THESIS

ENGR 5321 - ENVIRONMENTAL CHEM

ENGR 5324 - WATER REUSE

ENGR 5399A - THESIS

ENGR 5399B - THESIS

MSEC 7103 - RESEARCH MSEC

MSEC 7199 - DISSERTATION

MSEC 7203 - RESEARCH MSEC

MSEC 7299 - DISSERTATION

MSEC 7303 - RESEARCH MSEC

MSEC 7395H - ENVIRONMENTAL CHEM

MSEC 7999 - DISSERTATION

California State University, Fullerton :

CHEM 123 - Chemistry for Engineers

University of Alberta :

CIVE 221 - Environmental Engineering Fundamentals Laboratories

CIVE 620 - Environmental Engineering Measurement I

CIVE 627 - Environmental Engineering Measurement II

University of California, Riverside :

ENVE 142 - Water Quality Engineering

ENVE 146 - Water Quality Systems Design

C. Directed Student Learning (i.e. theses, dissertations, exit committees, etc.):

Supervisor / Chair, Master's Thesis, "Development of Photobiological Treatment of Reverse Osmosis Concentrate Using Sunlight (Tentative)", Status: Proposal. (August 2025 - Present). Ingram School of Engineering, Texas State University.
Student(s): Pragga Paul, Graduate, MS in Engineering.

Supervisor / Chair, Internship, "Research Internship (Integration of Reclaimed Water with Rainwater and HVAC Condensate)", Status: In Progress. (June 2025 - Present). Ingram School of Engineering, Texas State University.
Student(s): Ohm Shankar, High School.

Supervisor / Chair, Master's Thesis, "Augmentation of Reclaimed Water with Rainwater and Condensate for Direct Potable Reuse (Tentative)", Status: Proposal. (August 26, 2024 - Present). Ingram School of Engineering, Texas State University.
Student(s): Anjumand Ashraf, Graduate, MS in Engineering.

Supervisor / Chair, H-LSAMP Scholar Program, "H-LSAMP Scholar Program", Status: In Progress. (August 2023 - Present). Ingram School of Engineering, Texas State University.
Student(s): Simren Pokhrel, Undergraduate, BS in Civil Engineering.

Supervisor / Chair, Dissertation, "Mechanisms of Silicification and Biological Calcium Precipitation in Brackish Diatom Gedaniella flavovirens", Status: Proposal. (August 2021 - Present). Biology, Texas State University.
Student(s): Lokendra Acharya, Doctoral, PhD in Aquatic Resources and Integrative Biology.

Supervisor / Chair, Dissertation, "Enhanced Water Recovery by a Combination of Photobiological Process and Secondary Reverse Osmosis", Status: In Progress. (August 24, 2020 - Present). Materials Science, Engineering, and Commercialization, Texas State University.
Student(s): Jacob Palmer, Doctoral, Doctor of Philosophy.

Member, Master's Thesis, "Brackish Groundwater in Bexar County Texas: Suitability for Reverse Osmosis Desalination", Status: In Progress. (August 2020 - Present). Department of Geological Sciences, University of Texas, San Antonio.

Student(s): Katrina Poling, Graduate, Master of Science.

Supervisor / Chair, Internship, "Summer Research Internship (Photobiological Treatment of Reverse Osmosis Concentrate)", Status: Completed. (June 2025 - July 2025). Ingram School of Engineering, Texas State University.
Student(s): Harrison Gredick, High School.

Supervisor / Chair, Master's Thesis, "Online Analysis of N-Nitrosodimethylamine in Purified Reclaimed Water for Direct Potable Reuse", Status: Completed. (August 2023 - July 2025). Ingram School of Engineering, Texas State University.
Student(s): Khan Rasha, Graduate, MS in Engineering.

Supervisor / Chair, Master's Thesis, "INVESTIGATION OF THE TASTE, ODOR, AND APPEARANCE OF MUNICIPAL WASTEWATER EFFLUENT AND PURIFIED WATER FOR POTABLE REUSE", Status: Completed. (August 2022 - July 2024). Ingram School of Engineering, Texas State University.
Student(s): Carlos Espindola, Graduate, MS in Engineering.

Supervisor / Chair, Master's Thesis, "THE USE OF MIXED DIATOM CULTURES AND THE INFLUENCE OF THEIR MICROBIAL COMMUNITIES ON THE TREATMENT OF REVERSE OSMOSIS CONCENTRATE", Status: Completed. (August 2022 - July 2024). Biology, Texas State University.
Student(s): Emma Clow, Graduate, MS in Aquatic Resources.

Supervisor / Chair, Master's Thesis, "ONLINE MONITORING OF BACTERIA AND BROMATE USING PROTOTYPE ANALYZERS IN A PILOT DIRECT POTABLE REUSE SYSTEM", Status: Completed. (January 1, 2022 - May 2024). Ingram School of Engineering, Texas State University.
Student(s): Daniel Leontieff, Graduate.

Supervisor / Chair, Internship, "Research Internship", Status: Completed. (January 16, 2023 - August 30, 2023). Ingram School of Engineering, Texas State University.
Student(s): Collette Ingram, High School.

Member, Master's Thesis, "Development of cement-free bacteria-based bio concrete", Status: Completed. (November 29, 2022 - July 2023). Ingram School of Engineering, Texas State University.
Student(s): Maryam Ghadami, Graduate, MS in Engineering.

Member, Master's Thesis, "Redesigning Wastewater Treatment Plants for Transactive Energy Operations: A Machine Learning Approach", Status: Completed. (December 2022 - May 2023). Ingram School of Engineering, Texas State University.
Student(s): Shriyank Somvanshi, Graduate, MS in Engineering.

Member, Dissertation, "Detecting SARS-CoV-2 in Wastewater Using Novel Molecular Bouys", Status: Completed. (November 28, 2020 - April 2023). Materials Science, Engineering, and Commercialization, Texas State University.
Student(s): Isha Desai, Doctoral, PhD in MSEC.

Supervisor / Chair, Master's Thesis, "LIFECYCLE COST ANALYSIS OF A NEW REVERSE OSMOSIS CONCENTRATE MANAGEMENT SYSTEM USING BRACKISH DIATOMS FOR ENHANCED FRESHWATER RECOVERY", Status: Completed. (January 1, 2021 - December 17, 2022). Ingram School of Engineering, Texas State University.
Student(s): Emon Roy, Graduate, MS in Engineering.

Supervisor / Chair, Undergraduate Research Fellowship, "ASPIRE CoSE Undergraduate Research Fellowship", Status: Completed. (August 2022 - November 2022). Texas State University.
Student(s): Kamaya Bonds, Undergraduate, BST in Environmental Engineering Technology.

Faculty Sponsor - Senior Design Project, Project, "Pilot-scale Advanced Water Purification System for Direct Potable Reuse of Wastewater", Status: Completed. (January 2022 - May 2022). Engineering Technology, Texas State University.
Student(s): Carlos Espindola, Undergraduate, BST in Environmental Engineering Technology.
Christpher Houtz, Undergraduate, BST in Mechanical Engineering Technology.
Daniel Guerrero, Undergraduate, BST in Mechanical Engineering Technology.
Juan Lee-Rojas, Undergraduate, BST in Mechanical Engineering Technology.

Supervisor / Chair, Undergraduate Research Fellowship, "SURE Program", Status: Completed. (June 2021 - August 2021). Texas State University.
Student(s): Carlos Espindola, Undergraduate, BST in Environmental Engineering Technology.

Supervisor / Chair, Undergraduate Research Fellowship, "SURE Program", Status: Completed. (June 2021 - August 2021). Texas State University.
Student(s): Sara Roden, Undergraduate, BS in Chemistry.

Supervisor / Chair, Project, "Dual-Purpose Facility that Processes Storm Water and Reclaimed Water into a Drinkable Water Supply", Status: Completed. (May 2021 - August 2021). SURE Program, Texas State University.
Student(s): Carlos Espindola, Undergraduate, BS in Environmental Engineering Technology.

Supervisor / Chair, Project, "Mechanisms of Silica and Calcium Removal from Reverse Osmosis Concentrate by the Photobiological Treatment", Status: Completed. (May 2021 - August 2021). SURE Program, Texas State University.
Student(s): Sara Roden, Undergraduate, BS in Chemistry.

Member, Master's Thesis, "Planning for Virtual Power Plants in Smart Factory Systems under Variable Electric and Thermal Co-Generation", Status: Completed. (November 2020 - July 2021). Ingram School of Engineering, Texas State University.
Student(s): Honglin Li, Graduate, Master of Science.

Supervisor / Chair, Master's Thesis, "OPTIMIZING PHOTOBIOLOGICAL TREATMENT OF REVERSE OSMOSIS CONCENTRATE", Status: Completed. (August 2019 - July 2021). Ingram School of Engineering, Texas State University.
Student(s): Han Gao, Graduate, Master of Science.

Supervisor / Chair, H-LSAMP Scholar Program, "H-LSAMP Scholar Program", Status: Completed. (August 2020 - December 2020). Ingram School of Engineering, Texas State University.
Student(s): Paola Huynh.

Supervisor / Chair, Undergraduate Research Fellowship, "CoSE Undergraduate Research Fellowship", Status: Completed. (January 2020 - November 2020). Texas State University.
Student(s): Saul Gonzalez, Undergraduate, BS in Civil Engineering.

Supervisor / Chair, Master's Thesis, "Multivariate Analyses of the Effects of Land Use Change on River Water Quality: Case study of Manawatu River Watershed, New Zealand", Status: Completed. (August 2018 - June 30, 2020). Ingram School of Engineering, Texas State University.
Student(s): Imokhai Tenebe, Graduate, Master of Science.

Supervisor / Chair, Independent Study, Status: Completed. (January 2020 - May 2020). Biology, Texas State University.
Student(s): Dennis Davilla, Undergraduate, Bachelor of Science.

Member, Project, "A United States Environmental Protection Agency Campus Rainworks Challenge Proposal for the Integration of Educational Stormwater Runoff Mitigation at Texas State University, San Marcos, Texas", Status: Completed. (August 2019 - May 4, 2020). Sustainability Studies, Texas State University.
Student(s): Aspen Navarro, Graduate, Master of Science.

D. Courses Prepared and Curriculum Development:

CE 4323 Laboratory, First Time Course Preparation, Texas State University. Taught: August 2022 - December 2022.

CE 4323 Lecture, First Time Course Preparation, Texas State University. Taught: August 2022 - December 2022.

CE 5320, First Time Course Preparation, Texas State University. Taught: August 2021 - December 2021.

CE 3320 Laboratory, First Time Course Preparation, Texas State University. Taught: January 2021 - May 2021.

CE 3320 Lecture, First Time Course Preparation, Texas State University. Taught: January 2021 - May 2021.

CHEM 7330/MSEC 7395H, First Time Course Preparation, Texas State University. Taught: August 2020 - December 2020.

CIVE 620 Environmental Engineering Measurement I, Revise Existing Course, University of Alberta. Taught: September 2006 - December 2006.

ENVE 142 Water Quality Engineering, Revise Existing Course, University of California, Riverside. Taught: January 2019 - March 2019.

ENVE 146 Water Quality Systems Design, Revise Existing Course, University of California, Riverside. Taught: April 2018 - June 2019.

E. Teaching Grants and Contracts

3. Funded Internal Teaching Grants and Contracts:

Ikehata, Keisuke. Professional Development Fund Award for UCR Unit 18 Members, The University of California, Riverside, Institutional (Higher Ed), $1,016.64. (Funded: June 2019). Grant.

Ikehata, Keisuke. Professional Development Fund Award for UCR Unit 18 Members, The University of California, Riverside, Institutional (Higher Ed), $1,169.12. (Funded: June 2018). Grant.

F. Other:

Guest Lecture, CE 1210 Introduction to Smart Infrastructure - Sections 001, 002 & 003. San Marcos, TX, United States. 80. (September 25, 2025).

Guest Lecture, CE 1210 Introduction to Smart Infrastructure - Sections 251, 252. San Marcos, TX, United States. 60. (February 1, 2025).

Guest Lecture, CE 1210 Introduction to Smart Infrastructure - Sections 001 & 002. San Marcos, TX, United States. 30. (September 17, 2024).

Guest Lecture, CE 1210 Introduction to Smart Infrastructure - Section 251. San Marcos, TX, United States. 30. (February 1, 2024).

Guest Lecture, CE 1210 Introduction to Smart Infrastructure - Sections 002 and 003. San Marcos, TX, United States. 60. (September 8, 2023).

Guest Lecture, CE 1210 Introduction to Smart Infrastructure - Sections 251 and 252. San Marcos, TX, United States. 50. (February 7, 2023 - February 8, 2023).

Guest Lecture, CE 1210 Introduction to Smart Infrastructure - Sections 001, 002, and 003. San Marcos, TX, United States. 60. (September 27, 2022 - September 28, 2022).

Guest Lecture, HON 2303C Building a Greener Future: One Home at a Time. San Marcos, TX, United States. 18. (April 18, 2022 - April 20, 2022).

Guest Lecture, CE 1210 Introduction to Smart Infrastructure - Sections 251 and 252. San Marcos, TX, United States. 50. (February 7, 2022 - February 9, 2022).

Guest Lecture, CE 1210 Introduction to Smart Infrastructure. 60. (September 28, 2021 - September 30, 2021).

Guest Lecture, CE 1210 Introduction to Smart Infrastructure. San Marcos, TX, United States. 60. (April 15, 2021).

Guest Lecture, Guest Lecture: Ozone in Drinking Water Treatment, Columbia College, Sonora, CA. 15. (March 23, 2021).

Guest Lecture, CE 1210 Introduction to Smart Infrastructure. San Marcos, TX, United States. 60. (November 18, 2020).

Guest Lecture, Environmental Engineering and Water Resources Engineering - CE 1210 Introduction to Smart Infrastructure. 30. (February 2020).

Guest Lecture, Environmental Engineering and Water Resources Engineering - CE 1210 Introduction to Smart Infrastructure. San Marcos, TX, United States. 81. (October 14, 2019 - October 22, 2019).

Judge for OWLS Graduate Awards, Outstanding Interdisciplinary Research and Practicum Awards, Department of Organization, Workforce, and Leadership Studies, Texas State University. San Marcos, TX, United States. (November 2020).

Seminar, Biology Department Seminars "Using Brackish Diatoms for the Treatment of Desalination Wastewater Squeezing More Usable Water", Department of Biology, Texas State University. 40. (November 5, 2021).

Seminar, Enhancing Water Recovery in Potable Reuse by Diatom-based Photobiological Treatment Followed by Secondary RO, University of Texas, San Antonio – Environmental Science & Engineering Seminar, University of Texas, San Antonio. Online. 30. (October 26, 2020).

Seminar, Enhancing Water Recovery in Brackish Groundwater Desalination and Advanced Water Purification by Photobiological Treatment Followed by Secondary RO, Pacific University - Chemistry Research Seminar, Pacific University. Online. 20. (October 20, 2020).

Seminar, Enhancing Fresh Water Recovery in Brackish Groundwater Desalination by Diatom-based Photobiological Treatment, UTSA Geological Sciences and Institute of Water Research, Sustainability and Policy (IWRSP) Seminar, University of Texas, San Antonio. Online. 30. (October 9, 2020).

Seminar, Enhanced Water Recovery in Brackish Groundwater Desalination and Advanced Water Purification by Photobiological Treatment Followed by Secondary Reverse Osmosis, the Meadows Center for Water and the Environment – Lunch

Seminar, The Meadows Center for Water and the Environment. San Marcos, TX, United States. 25. (January 6, 2020).

Seminar, Development of a New Photobiological Treatment Process for Desalination and Water Reuse: NSF SBIR Phase I Project, Texas State University, MSEC Program Seminar Series. San Marcos, TX, United States. 40. (October 4, 2019).

Student Interview Project, Interviewing a Chemist of Color, Rhodes College, Memphis, TN. 3. (November 6, 2020).

Summer Camp, 2025 STC Summer Camp, Texas Department of Transportation. San Marcos, TX, United States. 20. (June 16, 2025).

Summer Camp, 2024 STC/NSTI Summer Camp, Texas Department of Transportation. San Marcos, TX, United States. 20. (July 25, 2024).

Summer Camp, 2023 NSTI Summer Camp, Texas Department of Transportation. San Marcos, TX, United States. 15. (July 18, 2023).

Summer Camp, 2021 NSTI Summer Camp, Texas Department of Transportation. San Marcos, TX, United States. 15. (July 27, 2021).

Summer Camp, 2019 NSTI Summer Camp, Texas Department of Transportation. San Marcos, TX, United States. 20. (August 2019).

Student Accomplishments:

Award:

Supervisor, The Ed Archuleta Desalter Scholarship. "Sunlight-Based Photobiological Treatment of Brackish Groundwater Reverse Osmosis Concentrate Using a Mixed Diatom Culture," 2025 Texas Desal 2025 Annual Conference, Bee Cave, TX. Status: Completed. (September 25, 2025). Ingram School of Engineering, Texas State University.
Student(s): Lokendra Acharya, Doctoral, PhD in Aquatic Resources & Integrative Biology.
Harrison Gredick, Irvington High School, Irvington, NY.

Supervisor, Best Student Poster Award (1st Place). "Analysis of N-Nitrosodimethylamine in Purified Reclaimed Water for Direct Potable Reuse," 2024 WateReuse Texas Conference, Austin, TX. Status: Completed. (September 10, 2024). Ingram School of Engineering, Texas State University.
Student(s): Khan Rasha, Graduate, MS in Engineering.
Peyton Torkelson, Undergraduate, BS in Chemistry.

Supervisor, Best Student Poster Award (2nd Place). "Integrating Reclaimed Water and Stormwater for Sustainable Potable Water Supply: Assessment of Benefits and Challenges," 2024 WateReuse Texas Conference, Austin,

TX. Status: Completed. (September 10, 2024). Ingram School of Engineering, Texas State University.
Student(s): Anjumand Ashraf, Graduate, MS in Engineering.
Espindola Carlos, Graduate, MS in Engineering.

Mentor, Membership Recruitment Award. "TAWWA-TXST Chapter," Texas Water 2024, Fort Worth, TX. Status: Completed. (March 2024). Texas State University.
Student(s): Kevin Cancino, Undergraduate, BS in Civil Engineering.
Rachel Mondy, Undergraduate, BS in Civil Engineering.
Jason Okoloafo, Undergraduate, BS in Mechanical Engineering.
Kamaya Bonds, Undergraduate, BS in Environmental Engineering Technology.

Supervisor, Best Student Poster Award (2nd Place). "A Case for Potable Reuse: Taste, Odor, and Appearance of Purified Wastewater," WateReuse Texas Conference 2023, Frisco, TX. Status: Completed. (September 22, 2023). Ingram School of Engineering, Texas State University.
Student(s): Espindola Carlos, Graduate, MS in Engineering.

Mentor, Membership Recruitment Award. "TAWWA-TXST Chapter," Texas Water 2023, Houston, TX. Status: Completed. (March 2023). Texas State University.
Student(s): Saul Gonzalez, Undergraduate, BS in Civil Engineering.
Carlos Espindola, Graduate, MS in Engineering.
Eunice Babatunde, Graduate, MS in Engineering.
Carlos Sanchez, Undergraduate, BS in Civil Engineering.

Supervisor, Student Poster Award. "Lifecycle Cost Page 7 of 20 Analysis of a New Reverse Osmosis Concentrate Management System Using Brackish Diatoms for Enhanced Freshwater Recovery," Texas Desal 2022, Bee Cave, TX. Status: Completed. (September 15, 2022). Ingram School of Engineering, Texas State University.
Student(s): Emon Roy, Graduate, MS in Engineering (Civil Engineering).
Saul Gonzalez, Undergraduate, BS in Civil Engineering.
Mason Underwood, Undergraduate, BS in Chemistry.

Supervisor, Student Poster Award. "Increasing Water Supplies Through Photobiological Treatment of Brackish Water Reverse Osmosis Concentrate," Texas Desal 2022, Bee Cave, TX. Status: Completed. (September 15, 2022). Ingram School of Engineering, Texas State University.
Student(s): Jacob Palmer, Doctoral, PhD in MSEC.
Saul Gonzalez, Undergraduate, BS in Civil Engineering.
Carlos Espindola, Graduate, MS in Engineering (Civil Engineering).

Mentor, Membership Recruitment Award. "TAWWA-TXST Chapter," Texas Water 2022, San Antonio, TX. Status: Completed. (March 2022). Texas State University.
Student(s): Saul Gonzalez, Undergraduate, BS in Civil Engineering.
Carlos Sanchez, Undergraduate, BS in Civil Engineering.
Carlos Espindola, Undergraduate, BST in Environmental Engineering Technology.
Sara Roden, Undergraduate, BS in Chemistry.

Competition:

Mentor. "Restore, Redirect, and Re-educate Green Infrastructure Integration for All Generations," US EPA Campus Rainworks Challenge. Status: Completed. (December 2020). Multiple (Geography and Biology), Texas State University.
Student(s): Allyson Schlandt, Graduate, Master of Science.
Daniel Vasquez, Undergraduate, Bachelor of Science.
Eryl Austin-Bingamon, Undergraduate, Bachelor of Science.

Mentor. "Runoff Mitigation Integration - An Innovative Alternative to Stormwater Management at Texas State University," US EPA Campus Rainwater Challenge. Status: Completed. (August 2019). Multiple (Sustainability Studeis and Geography), Texas State University.
Student(s): Aspen Navarro, Graduate, Master of Science.
Allyson Schlandt, Undergraduate, Bachelor of Science.
Francesca Filippone, Undergraduate, Bachelor of Science.

Fellowship:

Supervisor, 2022 National Water Research Institute Member Agency Fellow. "Direct Online Monitoring of Direct Potable Reuse System." Status: In Progress. (October 31, 2022). Ingram School of Engineering, Texas State University.
Student(s): Daniel Leontieff, Graduate, MS in Engineering.

Supervisor, AMTA/Reclamation Fellowships for Membrane Technology. "Enhanced Water Recovery by a Combination of Photobiological Process and Secondary Reverse Osmosis." Status: In Progress. (September 25, 2020). Ingram School of Engineering, Texas State University.
Student(s): Jacob Palmer, Doctoral, Doctor of Philosophy.

Presentation:

Supervisor, Poster Presentation. "Molecular Insights into Diatom-Based Silica Removal for RO Concentrate Management," Texas Desal 2025 Conference, Bee Cave, TX. Status: Completed. (September 25, 2025). Ingram School of Engineering, Texas State University.
Student(s): Lokendra Acharya, Doctoral, PhD in Aquatic Resources and Integrative Biology.

Supervisor, Poster Presentation. "Sunlight-Based Photobiological Treatment of Brackish Groundwater Reverse Osmosis Concentrate Using a Mixed Diatom Culture," Texas Desal 2025 Conference, Bee Cave, TX. Status: Completed. (September 25, 2025). Ingram School of Engineering, Texas State University.
Student(s): Harrison Gredick, Irvington High School, Irvington, NY.
Lokendra Acharya, Doctoral, PhD in Aquatic Resources and Integrative Biology.

Supervisor, Poster Presentation. "Simulating Blended Alternative Water Sources for Potable Reuse: A Monte-Carlo Based Analysis," 2025 WateReuse Texas Conference, Houston, TX. Status: Completed. (September 17, 2025). Ingram School of Engineering, Texas State University.
Student(s): Ohm Shankar, Westwood High School, Austin, TX.
Anjumand Ashraf, Graduate, MS in Engineering.

Supervisor, Poster Presentation. "Adaptive Transcriptomic Responses of Gedaniella flavovirens to Silica and Nutrient Limitation During Photobiological Treatment of Reverse Osmosis Concentrate," 2025 Phycological Society of America Annual Meeting, San Juan, Puerto Rico. Status: Completed. (July 2025). Biology, Texas State University.
Student(s): Lokendra Acharya, Doctoral, PhD in Aquatic Resources and Integrative Biology.

Supervisor, 2024 University Final Winners - 2nd Place. "Turning Stormwater and Reclaimed Water into Safe Drinking Water: A Circular System," Texas State Three Minute Thesis (3MT)®, San Marcos, TX. Status: Completed. (November 8, 2024). Ingram School of Engineering, Texas State University.
Student(s): Anjumand Ashraf, Graduate, MS in Engineering.

Supervisor, Poster Presentation. "Exploring De Novo Transcriptome Profiling and Gene Expression Dynamics in the Brackish Diatom Gedaniella flavovirens Across Stages of Photobiological Treatment of Reverse Osmosis Concentrate," 7th Annual WIN Workshop, Alamogordo, NM. Status: Completed. (October 24, 2024). Biology, Texas State University.
Student(s): Lokendra Acharya, Doctoral, PhD in Aquatic Resources and Integrative Biology.

Supervisor, Poster Presentation. "Online Analysis of N-Nitrosodimethylamine in Purified Reclaimed Water for Direct Potable Reuse," 2024 WateReuse Texas Conference, Austin, TX. Status: Completed. (September 10, 2024). Ingram School of Engineering, Texas State University.
Student(s): Khan Rasha, Graduate, MS in Engineering.
Peyton Torkelson, Graduate, BS in Chemistry.

Supervisor, Poster Presentation. "Integrating Reclaimed Water and Stormwater for Sustainable Potable Water Supply: Assessment of Benefits and Challenges," 2024 WateReuse Texas Conference, Austin, TX. Status: Completed. (September 10, 2024). Ingram School of Engineering, Texas State University.
Student(s): Anjumand Ashraf, Graduate, MS in Engineering.
Carlos Espindola, Graduate, MS in Engineering.

Supervisor, Oral Presentation. "Aesthetic Quality of Municipal Wastewater Effluent and Purified Water for Potable Reuse," 2024 WateReuse Texas Conference, Austin, TX. Status: Completed. (September 10, 2024). Ingram School of Engineering, Texas State University.
Student(s): Carlos Espindola, Graduate, MS in Engineering.

Supervisor, Oral Presentation. "Bacteria and Bromate Online Monitoring in a Pilot DPR System," 2024 WateReuse Texas Conference, Austin, TX. Status: Completed. (September 10, 2024). Ingram School of Engineering, Texas State University.
Student(s): Daniel Leontieff, Graduate, MS in Engineering.
Khan Rasha, Graduate, MS in Engineering.

Supervisor, Oral Presentation. "Rapid Removal of Scalants from Reverse Osmosis Concentrate Using Mixed Diatom Cultures from Brackish Wetlands in South Texas," Texas Water 2024, Forth Worth, TX. Status: Completed. (April 11, 2024). Ingram School of Engineering, Texas State University.
Student(s): Emma Clow, Graduate, MS in Aquatic Resources.
Jacob Palmer, Doctoral, PhD in Materials Science, Engineering and Commercialization.
Lokendra Acharya, Doctoral, PhD in Aquatic Resources and Integrative Biology.

Supervisor, Poster Presentation. "De Novo Transcriptome and Gene Expression Analysis in a Brackish Diatom Gedaniella flavovirens During the Photobiological Treatment of Reverse Osmosis Concentrate," 2024 TXST Graduate Student Research Conference, San Marcos, TX. Status: Completed. (April 2, 2024). Department of Biology, Texas State Universtiy.
Student(s): Lokendra Acharya, Doctoral, PhD in ARIB.

Mentor, Poster Presentation. "Weathering Effects on Polymeric Azobenzene Examined by Atomic Force Microscopy," 2024 Texas Society for Microbiology, San Marcos, TX. Status: Completed. (February 23, 2024). Department of Chemistry & Biochemistry, Texas Sate University.
Student(s): Scott Barrett, Doctoral, PhD in MSEC.

Supervisor, Oral Presentation. "Impact of Advanced Water Purification on the Aesthetic Quality of Tertiary-Treated Wastewater," 2024 Texas American Public Works Association Public Workshop, Wichita Falls, TX. Status:

Completed. (February 6, 2024). Ingram School of Engineering, Texas State University.
Student(s): Carlos Espindola, Graduate, MS in Engineering.

Supervisor, Oral Presentation. "Impact of Advanced Water Purification on the Aesthetic Quality of Tertiary-Treated Wastewater," 2024 Texas American Public Works Association Public Workshop, Wichita Falls, TX. Status: Completed. (February 5, 2024). Ingram School of Engineering, Texas State University.
Student(s): Carlos Espindola, Graduate, MS in Engineering.

Supervisor, Poster Presentation. "Diatom-Based Photobiological Treatment of Reverse Osmosis Concentrate: A De Novo Transcriptomic Approach to Study Silica Uptake and Calcium Precipitation," WateReuse Texas Conference 2023, Frisco, TX. Status: Completed. (September 22, 2023). Biology, Texas State University.
Student(s): Lokendra Acharya, Doctoral, PhD in Aquatic Resources and Integrative Biology.

Supervisor, Poster Presentation. "A Case for Potable Reuse: Taste, Odor, and Appearance of Purified Wastewater," WateReuse Texas Conference 2023, Frisco, TX. Status: Completed. (September 22, 2023). Ingram School of Engineering, Texas State University.
Student(s): Espindola Carlos, Graduate, MS in Engineering.

Supervisor, Poster Presentation. "Removal of Silica and Nutrients from Reverse Osmosis Concentrate through Diatom-Based Treatment Outdoors," 2023 TXST STEM Conference, San Marcos, TX. Status: Completed. (March 24, 2023). Engineering Technology / Biology, Texas State University.
Student(s): Kamaya Bonds, Undergraduate, BS in Environmental Engineering Technology.
Emma Clow, Graduate, MS in Aquatic Resources.

Supervisor, Poster Presentation. "Photobiological Treatment of Reverse Osmosis Concentrate Using Brackish Diatoms – Mini-Pilot Study," 2023 Membrane Technology Conference, Knoxville, TN. Status: Completed. (February 22, 2023). Ingram School of Engineering, Texas State University.
Student(s): Jacob Palmer, Doctoral, PhD in Materials Science, Engineering, and Commercialization.
Carlos Espindola, Graduate, MS in Engineering.
Saul, Undergraduate, Gonzalez.

Supervisor, Oral Presentation. "Design, Construction, and Operation of a Pilot-scale Advanced Water Purification System for Potable Water Reuse in Central Texas: A Students' Perspective ," Capital Area Chapter of Texas AWWA Annual Seminar 2023, Austin, TX. Status: Completed.

(February 3, 2023). Ingram School of Engineering, Texas State University.
Student(s): Carlos Espindola, Graduate, MS in Engineering (Civil Engineering).
Daniel Leontieff, Graduate, MS in Engineering (Civil Engineering).

Supervisor, Poster Presentation. "Increasing Water Supplies Through Photobiological Treatment of Brackish Water Reverse Osmosis Concentrate," Texas Desal 2022, Bee Cave, TX. Status: Completed. (September 15, 2022). Ingram School of Engineering, Texas State University.
Student(s): Jacob Palmer, Doctoral, PhD in MSEC.
Saul Gonzalez, Undergraduate, BS in Civil Engineering.
Carlos Espindola, Graduate, MS in Engineering.

Supervisor, Poster Presentation. "Lifecycle Cost Analysis of a New Reverse Osmosis Concentrate Management System Using Brackish Diatoms for Enhanced Freshwater Recovery," Texas Desal 2022, Bee Cave, TX. Status: Completed. (September 15, 2022). Ingram School of Engineering, Texas State University.
Student(s): Emon Roy, Graduate, MS in Engineering.
Saul Gonzalez, Undergraduate, BS in Civil Engineering.
Mason Underwood, Undergraduate, BS in Microbiology.

Supervisor, Oral Presentation. "Ozonation and Advanced Oxidation Treatment of Amine-Based Carbon Capture Process Wastewaters," 2022 International Ozone Association-Pan American Group Annual Conference, Las Vegas, NV. Status: Completed. (August 17, 2022). Ingram School of Engineering, Texas State University.
Student(s): Daniel Leontieff, Graduate, MS in Engineering (Civil Engineering).

Supervisor, Poster Presentation. "Freshwater Recovery from Brackish Groundwater RO Concentrate via Photobiological Treatment and Secondary RO," 2022 Membrane Technology Conference, Las Vegas, NV. Status: Completed. (February 23, 2022). Ingram School of Engineering, Texas State University.
Student(s): Jacob Palmer, Doctoral, PhD in MSEC.

Supervisor, Poster Presentation. "Biomass Characterization for the Lifecycle Cost Analysis of a New Reverse Osmosis Concentrate Management Process," 2021 Texas Groundwater Summit, San Antonio, TX. Status: Completed. (August 31, 2021). Ingram School of Engineering, Texas State.
Student(s): Emon Roy, Graduate, MS in Engineering.

Supervisor, Poster Presentation. "Enhancing Brackish Water Utilization via a Combination of Photobiological Process and Secondary Reverse

Osmosis," 2021 Texas Groundwater Summit, San Antonio, TX. Status: Completed. (August 31, 2021). Materials Science, Engineering, and Commercialization, Texas State University.
Student(s): Jacob Palmer, Doctoral, PhD in MSEC.

Mentor. "Dual-Purpose Facility that Processes Storm Water and Reclaimed Water into a Drinkable Water Supply," SURE Symposium 2021, San Marcos, TX. Status: Completed. (August 4, 2021). Engineering Technology, Texas State University.
Student(s): Carlos Espindola, Undergraduate, BS in Environmental Engineering Technology.

Mentor. "Mechanisms of Silica and Calcium Removal from Reverse Osmosis Concentrate by the Photobiological Treatment," SURE Symposium 2021, San Marcos, TX. Status: Completed. (August 4, 2021). Chemistry & Biochemistry, Texas State University.
Student(s): Sara Roden, Undergraduate, BS in Chemistry.

Supervisor. "Enhanced Water Recovery by a Combination of Photobiological Process and Secondary Reverse Osmosis," 2021 Membrane Technology Conference, West Palm Beach, FL. Status: Completed. (July 22, 2021). Ingram School of Engineering, Texas State Universtiy.
Student(s): Jacob Palmer, Doctoral, PhD in MSEC.
Han Gao, Graduate, MS in Engineering.
Dustin Walker, Undergraduate, BS in Civil Engineering.
Paola Huynh, Undergraduate, BS in Civil Engineering.

Supervisor. "Enhanced Water Recovery by a Combination of Photobiological Process and Secondary Reverse Osmosis," Advancements in Membrane Research Webinar Part 2, Virtual. Status: Completed. (March 25, 2021). Ingram School of Engineering, Texas State University.
Student(s): Jacob Palmer, Doctoral, PhD in MSEC.

Supervisor. "Treatability of Brackish Groundwater Reverse Osmosis Concentrate to a Novel Photobiological Processes," Fall 2020 Virtual Honors Research Forum, Online. Status: Completed. (November 20, 2020). Ingram School of Engineering, Texas State University.
Student(s): Paola Huynh, Undergraduate, Bachelor of Science.
Dustin Walker, Undergraduate, Bachelor of Science.

Mentor. "Brackish Groundwater in Bexar County Texas: Suitability for Reverse Osmosis Desalination," Geological Society of America 2020 Annual Meeting, Online. Status: Completed. (October 26, 2020). Department of Geological Sciences, University of Texas, San Antonio.
Student(s): Katrina Poling, Graduate, Master of Science.

Scholarship:

Supervisor, Water Environment Association of Texas-Central Texas Section Scholarship. Status: Completed. (October 2024). Ingram School of Engineering, Texas State University.
Student(s): Anjumand Ashraf, Graduate, MS in Engineering.

Supervisor, Texas AWWA Captital Area Chapter Scholarship. Status: Completed. (November 2023). Ingram School of Engineering, Texas State University.
Student(s): Espindola Carlos, Graduate, MS in Engineering.

Supervisor, Texas AWWA Scholarship. Status: Completed. (October 2023). Ingram School of Engineering, Texas State University.
Student(s): Espindola Carlos, Graduate, MS in Engineering.

Supervisor, Doctoral Retention Scholarship. Status: Completed. (August 17, 2023). Biology, Texas State University.
Student(s): Lokendra Acharya, Doctoral, PhD in Aquatic Resources and Integrative Biology.

Supervisor, Student Government Scholarship. Status: Completed. (April 13, 2023). Biology, Texas State University.
Student(s): Lokendra Acharya, Doctoral, PhD in Aquatic Resources and Integrative Biology.

Supervisor, Graduate College Scholarship-Science and Engineering Fall 2023. Status: Completed. (April 5, 2023). Biology, Texas State University.
Student(s): Lokendra Acharya, Doctoral, PhD in Aquatic Resources and Integrative Biology.

G. Teaching Professional Development Activities Attended

Workshop, "Faculty of Color Meeting," Faculty of Color at Texas State (FoCaTS), San Marcos, TX, United States. (January 2021 - December 2023).

Weekly Lunchtime Discussion Series, "Let's Do Lunch!," Faculty Development, Texas State University. (April 3, 2020 - March 31, 2023).

Workshop, "Faculty-Student Communities for Improving STEM Instruction," Texas State University, San Marcos, TX, United States. (October 2019 - March 2022).

Workshop, "Back to the Future: Re-engaging Students in the Post-Pandemic Classroom," Faculty Development, Texas State University, San Marcos, TX, United States. (January 25, 2022).

Workshop, "AIMing for the Future: New Processes for Testing and Accommodations for Spring 2022," Faculty Development, Texas State University, San Marcos, TX, United States. (January 13, 2022).

Workshop, "Setting Your Intentions: Inclusive Syllabus Design," Faculty Development, Texas State University, San Marcos, TX, United States. (August 10, 2021).

Workshop, "Helping First Generation College Students Survive and Thrive in Your Class," Faculty Development, Texas State University, San Marcos, TX, United States. (April 1, 2021).

Workshop, "Designing Open Book/Open Note Multiple Choice Exams," Faculty Development, Texas State University, San Marcos, TX, United States. (January 12, 2021).

Workshop, "Teaching Online at Texas State - Hybrid," Texas State University, San Marcos, TX, United States. (July 24, 2020).

Workshop, "1st Annual Orange County High School Chemistry Symposium," Irvine, CA, United States. (March 9, 2019).

III. SCHOLARLY/CREATIVE

A. Works in Print (including works accepted, forthcoming, in press):

1. Books:

c. Edited Books:

Refereed:

Wert, E. C., & Ikehata, K. (2010). *Proceedings of the International Ozone Association-Pan American Group 2010 Annual Conference*. Scotsdale, Arizona: International Ozone Association.

Ikehata, K., & Smith, D. W. (2008). *Proceedings of the International Ozone Association-Pan American Group 2008 Annual Conference*. Scotsdale, Arizona: International Ozone Association.

Ikehata, K., Bolton, J. R., Gamal El-Din, M., & Smith, D. W. (2007). *Proceedings of the IOA-IUVA Joint World Congress*. Scotsdale, Arizona: International Ozone Association and International Ultraviolet Association.

d. Chapters in Books:

Refereed:

Ikehata, K., Cooper, J. T., & Steinitz-Kannan, M. (Accepted / In Press). Chapter 7.6: Bacillariophyta (Diatoms). In *M57, Alage: Source to Treatment, 2nd Edition*. Denver, CO: American Water Works Association.

Ikehata, K. (Accepted / In Press). Chapter 15: Chemical Oxygen Demand. In *M12 Simplified Procedures for Water Examination, 7th Edition*. American Water Works Association.

Ikehata, K. (Accepted / In Press). Chapter 44: Ozone. In *M12 Simplified Procedures for Water Examination, 7th Edition*. American Water Works Association.

Ikehata, K. (Accepted / In Press). Chapter 53: Sulfide (Total). In *M12 Simplified Procedures for Water Examination, 7th Edition*. American Water Works Association.

Ikehata, K., & Li, Y. (2018). Chapter 5: Ozone-based Processes. In S. Ameta & R. Ameta (Eds.), *Advanced Oxidation Processes for Wastewater Treatment – Emerging Green Chemical Technology* (pp. 115–134). Cambridge, MA: Elsevier S &T Book, Academic Press.

Ikehata, K. (2018). Chapter 9: Recent research on ozonation by-products in water and wastewater treatment: Formation, control, mitigation, and other relevant topics. In B. X. Thanh, C. Chiemchaisri, T. Fujioka, & S. Varjani (Eds.), *Recent Advances in Water and Wastewater Treatment* (pp. 117–144). Springer Publishing Company.

Ikehata, K. (2016). Chapter 2: Applications of ozone technologies in North America (in Japanese). In J. O. Association (Ed.), *Ozone Handbook* (2nd ed., pp. 17–36). Yokohama, Japan: Sanyu Publishing.

Ikehata, K. (2015). Enzymatic treatment of wastewater containing synthetic dyes using fungal laccases and peroxidases. In S. K. Sharma (Ed.), *Dyes Removal from Waste Water Using Green Technologies* (pp. 203–260). Beverly, Massachusetts, United States: Wiley-Scrivener Publishing.

Ikehata, K., Jin, Y., Maleky, N., & Lin, A. (2015). Heavy metal pollution in water resources in China – Occurrence and public health implications. In S. K. Sharma (Ed.), *Heavy Metals in Water: Presence, Removal and Safety* (pp. 141–167). London, UK: Royal Society of Chemistry.

Ikehata, K., Komor, A. T., & Jin, Y. (2015). Removal of iron and manganese from water – Chemistry and engineering considerations. In S. K. S. (Ed.), *Heavy Metals in Water: Presence, Removal and Safety* (pp. 122–140). London, UK: Royal Society of Chemistry.

Ikehata, K. (2013). Hazardous agents in wastewater: Public health impacts and treatment options for safe disposal and reuse. In S. K. Sharma & Sanghi (Eds.), *Wastewater Reuse and Management* (pp. 165–191). Dordrecht, the Netherlands: Springer Publishing Company.

Ikehata, K. (2013). Wastewater treatment using a fungal peroxidase from Coprinopsis species (in Japanese). In Mycological Soceity of Japan (Ed.),

Kinrui no Jiten (Encyclopedia of Fungi) (pp. 544–545). Tokyo, Japan: Asakura Publishing.

Ikehata, K., & Liu, Y. (2011). Land disposal of wastes. In J. Nriagu (Ed.), *Encyclopedia of Environmental Health* (pp. 353–361). Amsterdam, Netherlands: Elsevier B.V.

Ikehata, K., Buchanan, I. D., & Smith, D. W. (2003). Production of enzymes for environmental applications. A review. In A. Sakuri (Ed.), *Wastewater Treatment Using Enzymes* (pp. 1–40). Kerala, India: Research Signpost.

2. Articles:

a. Refereed Journal Articles:

Leontieff, D. A., Ikehata, K., Inanaga, Y., & Furukawa, S. (2025). Ozone for Industrial Wastewater Treatment: Recent Advances and Sector Applications. *Processes*, *13*(8). https://doi.org/https://doi.org/10.3390/pr13082331

Adams, J. H., Fulton, C. S., Southard, M., Shao, J., Reeder, S., Price, J., … Ikehata, K. (2025). Academia-Industry Collaboration: Water Chemistry and Environmental Education. *Journal of Chemical Education*, *102*(8), 3408–3415. https://doi.org/https://doi.org/10.1021/acs.jchemed.5c00246

Adams, H., Reeder, S., Kohoutek, K., HoppeJones, C., Pochiraju, S., Southard, M., … Lipps, W. C. (2025). Method Development, Interlaboratory Comparison, and Occurrence Study for 19 Taste and Odor Compounds by SolidPhase Microextraction Gas Chromatography–Mass Spectrometry. *AWWA Water Science*, *7*(1), e70013. https://doi.org/10.1002/aws2.70013 https://doi.org/10.1002/aws2.70013

Gao, H., Roy, E., Underwood, M. S., Adams, H., Kulkarni, H. V., Datta, S., … Ikehata, K. (2025). Diatom-Based Photobiological Treatment of Reverse Osmosis Concentrate: Optimization of Light and Temperature and Biomass Analysis. *Phycology*, *5*(1), 3. https://doi.org/10.3390/phycology5010003 https://doi.org/10.3390/phycology5010003

Adams, H., Burlingame, G. A., Southard, M., Dietrich, A. M., Bartrand, T., & Ikehata, K. (2024). Water safety planning application for aesthetic quality of drinking water. *Journal of Water and Health*, *22*(11), 2160–2170. https://doi.org/10.2166/wh.2024.277 https://doi.org/10.2166/wh.2024.277

Gerrity, D., Eisenberg, J. N. S., Gerba, C. P., Ikehata, K., & Mena, K. (2024). Correspondence on “Direct potable reuse and birth defects prevalence in Texas”: An augmented synthetic control method analysis of data from a population-based birth defects registry. *Environmental Epidemiology*, *8*(6), e346. https://doi.org/https://doi.org/10.1097/EE9.0000000000000346

Ikehata, K., Espindola, C. A., Ashraf, A., & Adams, H. (2024). Augmentation of Reclaimed Water with Excess Urban Stormwater for Direct Potable Use. *Sustainability*, *16*(18), 7917. https://doi.org/10.3390/su16187917 https://doi.org/10.3390/su16187917

Gao, H., Sato, S., Kodamatani, H., Fujioka, T., Ishida, K. P., & Ikehata, K. (2024). Optimization of Dissolved Silica Removal from Reverse Osmosis Concentrate by Gedaniella flavovirens for Enhanced Water Recovery. *Sustainability*, *16*, 4052. https://doi.org/https://doi.org/10.3390/su16104052

Adams, J. H., Pochiraju, S., Ikehata, K., Southard, M., Reeder, S., Appleton, E., & Nix, D. (2023). New Production Pathway of Musty 2,4,6-Tribromoanisole During Raw Water Disinfection Processes at a Surface Water Treatment Plant. *Water Supply*, *23*(11), 4416–4424. https://doi.org/https://doi.org/10.2166/ws.2023.264

Adams, J., Burlingame, G., Ikehata, K., Furatian, L., & Suffet, I. (Mel) H. (2022). The effect of pH on taste and odor production and control of drinking water. *AQUA – Water Infrastructure, Ecosystems and Society*, *71*(11), 1278–1290. Retrieved from https://doi.org/10.2166/aqua.2022.133 https://doi.org/10.2166/aqua.2022.133

Ikehata, K., Nakamura, N., Kulkarni, H. V., Zhao, Y., Maleky, N., Sato, S., & Gao, H. (2022). Isolation and evaluation of brackish water diatoms from evaporation ponds for the treatment of silica- and nutrient-rich brackish wastewater. *AQUA – Water Infrastructure, Ecosystems and Society*, *71*(9), 1083–1094. Retrieved from https://doi.org/10.2166/aqua.2022.082 https://doi.org/10.2166/aqua.2022.082

Adams, J., Smith, S. A., Reeder, S., Appleton, E., Leinweber, B., Forbes, S., … Southard, M. (2022). Characterizing and mitigating cyanobacteria blooms in drinking water reservoirs. *Journal American Water Works Association*, *114*(4), 26–38. Retrieved from https://doi.org/10.1002/awwa.1901 https://doi.org/10.1002/awwa.1901

Tran, H. D. M., Boivin, S., Kodamatani, H., Ikehata, K., & Fujioka, T. (2021). Potential of UV-B and UV-C irradiation in disinfecting microorganisms and removing N-nitrosodimethylamine and 1,4-dioxane for potable water reuse: A review. *Chemisphere*, *286*. Published. https://doi.org/https://doi.org/10.1016/j.chemosphere.2021.131682

Adams, J. H., Southard, M., Reeder, S., Buerkens, F., Hallford, R. L., Ikehata, K., & Nix, D. K. (2021). Successfully detecting and mitigating algal blooms and taste and odor compounds. *Journal American Water Works Association*, *113*(6), 10–19. https://doi.org/https://doi.org/10.1002/awwa.1743

Fujioka, T., Kodamatani, H., Tran, H. D. M., Hino, K., Yoshikawa, T., Inoue, D., & Ikehata, K. (2021). Degradation of N-nitrosamines and 1,4-dioxane using vacuum ultraviolet irradiation (UV254 nm+185 nm or UV172 nm).

Chemosphere, *278*. Published. https://doi.org/https://doi.org/10.1016/j.chemosphere.2021.130326

Fujioka, T., Kodamatani, H., Yoshikawa, T., Inoue, D., & Ikehata, K. (2020). Assessment of 265-nm UV LED for direct photolysis and advanced oxidation of N-nitrosamines and 1,4-dioxane. *Environmental Technology & Innovation*, *20*. Published. https://doi.org/https://doi.org/10.1016/j.eti.2020.101147

Fujioka, T., Ngo, M. T. T., Makabe, R., Boivin, S., & Ikehata, K. (2020). Pretreatment of surface waters and wastewater by a hemodiafilter for online bacterial counting. *ACS EST Water*. Published. https://doi.org/https://doi.org/10.1021/acsestwater.0c00008

Kulkarni, H., Zhao, Y., & Ikehata, K. (2019). Factors influencing photobiological treatment process to remove reactive silica from brackish groundwater reverse osmosis concentrate. *Desalination*, *452*, 114–122. https://doi.org/10.1016/j.desal.2018.11.009

Ikehata, K., Zhao, Y., Kulkarni, H. V., & Li, Y. (2019). Treatment of RO concentrate from six potable reuse facilities in the southwestern U.S. with a new photobiological process. *Water Supply*, *19*(6), 1661–1667. https://doi.org/https://doi.org/10.2166/ws.2019.040

Ikehata, K., Zhao, Y., Ma, J., Komor, A. T., Maleky, N., & Anderson, M. A. (2018). A novel photobiological process for reverse osmosis concentrate treatment using brackish water diatoms. *Water Science and Technology: Water Supply*, *18*(2), 594–602. https://doi.org/10.2166/ws.2017.142.

Ikehata, K., Li, Y., Komor, A. T., & Gibson, G. W. (2018). Free chlorine disinfection of full-scale MBR effluent to achieve 5-log virus inactivation. *Water Environment Research*, *90*(7), 623–633. https://doi.org/10.2175/106143017X15131012153103

Ikehata, K., Zhao, Y., Kulkarni, H. V., Li, Y., Synder, S. A., Ishida, K. P., & Anderson, M. A. (2018). Water recovery from advanced water purification facility reverse osmosis concentrate by photobiological treatment followed by secondary reverse osmosis. *Environmental Science & Technology*, *52*(12), 8588–8595. https://doi.org/10.1021/acs.est.8b00951.

Ikehata, K., Zhao, Y., Maleky, N., Komor, A. T., & Anderson, M. A. (2017). Aqueous silica removal from agricultural drainage water and reverse osmosis concentrate by brackish water diatoms in semi-batch photobioreactors. *Journal of Applied Phycology*, *29*(1), 223–233. https://doi.org/10.1007/s10811-016-0907-3

Ikehata, K., Fujioka, T., Masaki, S., & Kodamatani, H. (2017). Degradation of N-nitrosodimethylamine by UV-based advanced oxidation processes for potable reuse: A short review. *Current Pollution Report*, *3*(2), 79–87. https://doi.org/10.1007/s40726-017-0052-x.

Ikehata, K., Wang-Staley, L., Qu, X., & Li, Y. (2016). Treatment of groundwater contaminated with 1,4-dioxane, tetrahydrofuran, and chlorinated volatile organic compounds using advanced oxidation processes. *Ozone: Science and Engineering*, *38*(6), 413–424. https://doi.org/10.1080/01919512.2016.1198686

Ikehata, K., Anderson, M. A., & Komor, A. K. (2014). Flow routing with bottom withdrawal to improve water quality. *Lake and Reservoir Management*, *30*(2), 131–142.

Ikehata, K., Wang, L., Nessl, M. B., Komor, A. T., Cooper, W. J., & McVicker, R. R. (2013). Effect of ammonia and chloramine pretreatment during the ozonation of a colored groundwater with elevated bromide. *Ozone: Science and Engineering*, *35*(6), 438–447.

Ikehata, K., Nakonechny, M., & El-Din Gamal, M. (2008). Kinetics of estrone ozone/hydrogen peroxide advanced oxidation treatment. *Ozone: Science and Engineering*, *30*(4), 249–255.

Ikehata, K., El-Din Gamal, M., & Snyder, S. A. (2008). Ozonation and advanced oxidation treatment of emerging organic pollutants in water and wastewater. *Ozone: Science and Engineering*, *30*(1), 21–26.

Ikehata, K., Duzhak, T. G., Galeva, N. A., Ji, T., Koen, Y. M., & Hanzlik, R. P. (2008). Protein targets of reactive metabolites of thiobenzamide in rat liver. *Chemical Research in Toxicology*, *21*(7), 1432–1442.

Ikehata, K., Yang, H., Xiao, J., El-Din Gamal, M., Buchanan, I. D., & Bromley, D. (2007). Soil-based treatment of partially treated liquid swine manure. *Environmental Technology*, *28*(1), 59–70.

Ji, T., Ikehata, K., Koen, Y. M., Esch, S. W., Williams, T. D., & Hanzlik, R. P. (2007). Covalent Modification of Microsomal Lipids by Thiobenzamide Metabolites in Vivo. *Chemical Research in Toxicology*, *20*(4), 701–708. https://doi.org/10.1021/tx600362h https://doi.org/10.1021/tx600362h

Ikehata, K., P Singh, El-Din Gamal, M., & Bromley, D. (2006). Alum settling and filtration treatment of liquid swine manure. *Transactions of the ASABE*, *49*(5), 1487–1494.

Ikehata, K., & El-Din Gamal, M. (2006). Aqueous pesticide degradation by hydrogen peroxide/ultraviolet irradiation and Fenton-type advanced oxidation processes: A review. *Journal of Environmental Engineering and Science*, *5*(2), 81–135.

Ikehata, K., Naghashkar, N. J., & El-Din Gamal, M. (2006). Degradation of aqueous pharmaceuticals by ozonation and advanced oxidation processes: A review. *Ozone: Science and Engineering*, *28*(6), 353–414.

Ikehata, K., El-Din Gamal, M., Smith, D. W., & Al Momani, F. (2006). Ozone treatment for the degradation of resin and unsaturated fatty acids at low temperatures. *Journal of Environmental Engineering and Science*, *5*(S1), S95–S102.

Ikehata, K., Singh, P., El-Din Gamal, M., Bromley, D., & Craik, S. A. (2006). UV inactivation of bacteria in raw and pre-treated liquid swine manure. *Environmental Technology*, *27*(11), 1261–1270.

Ikehata, K., & El-Din Gamal, M. (2005). Aqueous pesticide degradation by ozonation and ozone-based advance oxidation processes: A review (Part I). *Ozone: Science and Engineering*, *27*(2), 83–114.

Ikehata, K., & El-Din Gamal, M. (2005). Aqueous pesticide degradation by ozonation and ozone-based advance oxidation processes: A review (Part II). *Ozone: Science and Engineering*, *27*(3), 173–202.

Ikehata, K., Buchanan, I. D., Pickard, M. A., & Smith, D. W. (2005). Purification, characterization and evaluation of extracellular peroxidase from two Coprinus species for aqueous phenol treatment. *Bioresource Technology*, *96*(16), 1758–1770.

Ikehata, K., & El-Din Gamal, M. (2004). Degradation of recalcitrant surfactants in wastewater by ozonation and advanced oxidation processes: A review. *Ozone: Science and Engineering*, *26*(4), 327–343.

Ikehata, K., Buchanan, I. D., & Smith, D. W. (2004). Extracellular peroxidase production by Coprinus species from urea treated soil. *Canadian Journal of Microbiology*, *50*(1), 57–60.

Ikehata, K., Pickard, M. A., Buchanan, I. D., & Smith, D. W. (2004). Optimization of extracellular fungal peroxidase production by two Coprinus species. *Canadian Journal of Microbiology*, *50*(12), 1033–1040.

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b. Non-refereed Articles:

Ikehata, K. (2025). Exploring the Innovation Horizon for a Brighter Water Future. *Journal AWWA*, *117*(1), 68–70. https://doi.org/https://doi.org/10.1002/awwa.2390

Holloway, N., Adams, J. H., Espindola, C. A., & Ikehata, K. (2024). Microplastics and the Water Industry. *Journal American Water Works Association*, *116*(4), 36–44. https://doi.org/https://doi.org/10.1002/awwa.2264

Adams, J. H., Eyring, A., Albert, J., Hendricks, A., Ahmad, R., Wyatt, A., … Horne, D. (2023). Research Collaborations with Water and Wastewater Utilities. *Journal American Water Works Association*, *115*(6), 46–54. https://doi.org/https://doi.org/10.1002/awwa.2125

Burlingame, G. A., J. Hunter, Furatian, L., & Ikehata, K. (2022). Taste and odor control: How we got to where we are today. *Journal American Water Works Association*, *114*(10), 83–84. Retrieved from https://doi.org/10.1002/awwa.2022 https://doi.org/10.1002/awwa.2022

Ikehata, K., Qu, X., Zhao, Y., Yu, R., Li, Y., Falzone, C., & Smith, G. (2016). Health effects associated with wastewater treatment, reuse, and disposal. *Water Environment Research*, *88*(10), 1823–1855.

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Ikehata, K., Wang, L., Ferons, D. P., Ma, W., Nessl, M. B., Peterson, J. D., & Jin, Y. (2012). Health effects associated with wastewater treatment, reuse, and disposal. *Water Environment Research*, *84*(10), 1824–1855.

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Benjamin, J., Adams, J. H., Ikehata, K., Texas Water 2025, "Wichita Falls DPR Experience: A Water Quality Perspective," Texas AWWA-Water Environment Association of Texas, Houston, TX, United States. (March 20, 2025).

Adams, J. H., Ikehata, K., Burlingame, G., Dietrich, A., 2023 Water Quality Technology Conference, "Water Quality Taste, Odor, and Appearance in Distribution Systems," American Water Works Association, Dallas, TX, United States. (November 8, 2023).

Ikehata, K., Espindola, C. A., Leontieff, D. A., Kite, P., Shropshire, P., WateReuse Texas Conference 2023, "Advanced Water Purification & Potable Reuse Pilot Studies in Central Texas," WateReuse Texas, Hyatt Regency, Frisco, TX, United States. (September 22, 2023).

Ikehata, K., WateReuse Texas Conference 2023, "Photobiological Process Enhances Water Recovery at Potable Reuse Facilities," WateReuse Texas, Hyatt Regency, Frisco, TX, United States. (September 21, 2023).

Ikehata, K., Leontieff, D. A., Espindola, C. A., Walker, D. M., Fujioka, T., Kodamatani, H., Takeuchi, H., 2023 International Ozone Association-Pan American Group Annual Conference, "Online Monitoring of Bromate Formation at a Pilot-scale Advanced Water Purification System for Potable Reuse Using Ozone," International Ozone Association-Pan American Group, Kansas City, MO, United States. (August 30, 2023).

Adams, J. H., Burlingame, G., Furatian, L., Ikehata, K., Chowdhury, Z., Pochiraju, S., 2023 Technology Transfer Conference, "Water Quality Aesthetics: How We Got Where We Are Today," Water Environment Association of South Carolina-South Carolina American Water Works Association, Greenville, SC, United States. (January 26, 2023).

Zhu, C., Jin, T., Ikehata, K., IISE Annual Meeting, "A Comparative Study of Machine Learning Algorithms for Long-Term Daily Water Usage Forecasting," Institute of Industrial and Systems Engineers, Seattle, WA, United States. (June 2022).

Ikehata, K., Espindola, C. A., Adams, J. Hunter, Steinle-Darling, E., Texas Water 2022, "Augmentation of Reclaimed Water with Excess Urban Stormwater: A New Holistic Approaches to Sustainable Water Resources Management for Central Texas(?)," Texas Water Works Association-Water Environment Association of Texas, San Antonio, TX, United States. (April 7, 2022).

Ikehata, K., Roy, E., 2022 Membrane Technology Conference, "Lifecycle Cost Analysis of Photobioreactor Followed by Secondary RO for Enhanced Water Recovery in Brackish Water Desalination," American Membrane Technology Association-American Water Works Association, Las Vegas, NV, United States. (February 24, 2022).

Ikehata, K., Palmer, J. A., Gao, H., Roden, S. N., Roy, E., Gonzalez, S., Adams, J. H., Kulkarni, H. V., Datta, S., GSA Connects 2021, "Comparison of Chemical and Photobiological Methods for the Removal of Dissolved Silica and Calcium Hardness from Brackish Groundwater Reverse Osmosis Concentrate," Geological Society of America, Portland, OR, United States. (October 11, 2021).

Poling, K. M., Kulkarni, H. V., Datta, S., Ikehata, K., GSA Connects 2021, "Investigating Biological Methods for Improving Reverse Osmosis Based Desalination of Bracksh Groundwater in Bexar County, Texas," Geological Society of America, Portland, OR, United States. (October 11, 2021).

Ikehata, K., ASCE Texas CECON 2021, "Direct and Indirect Potable Reuse of Reclaimed Water Augmented with Excess Storm Water: A New Holistic Approach to Sustainable Water Resources Management for Central Texas?," Texas Section ASCE, San Marcos, TX, United States. (September 15, 2021).

Ikehata, K., Gao, H., J. A., Rojas Annicchiarico, C. D., Kulkarni, H. V., Datta, S., 2021 Membrane Technology Conference, "Dissolved Silica, Calcium, and Nutrient Removal from Reverse Osmosis Concentrate by the Diatom-Based Photobiological Treatment," American Membrane Technology Association, American Water Works Association, West Palm Beach, FL, United States. (July 21, 2021).

Ikehata, K. (Presenter), Gao, H. (Co-author), J. A. (Co-author), Huynh, P. A. (Co-author), Walker, D. M. (Co-author), Texas Water 2021, "Enhancing Freshwater Recovery in Brackish Groundwater Desalination by Photobioloigcal Treatment Using Brackish Diatoms," Texas Section AWWA, Virtual. (April 1, 2021).

Ikehata, K., Kulkarni, H. V., Zhao, Y., Li, Y., IWA World Water Congress & Exhibition 2018, "Treatment of RO concentrate from 5 potable reuse facilities in the southwestern U.S. with a new photobiological process.," Tokyo, Japan. (2018).

Ikehata, K., 23rd Annual Conference on Ozone Science and Technology in Japan, "Applications of advanced oxidation processes in water reuse (in Japanese)," Tokyo, Japan. (August 7, 2018).

Ikehata, K., Li, Y., Komor, A. T., Kleinheinz, J. A., Lee, D. S., 2018 International Symposium on Biological Treatment, "Biological filtration of groundwater for low-level hydrogen sulfide removal," Austin, TX, United States. (January 24, 2018).

Ikehata, K., Li, Y., Zhao, Y., Sanchez, S., Kulkarni, H. V., 2018 International Symposium on Potable Reuse, "Recovering more usable water and reducing concentrate with photobiological treatment followed by secondary reverse osmosis," Austin, TX, United States. (January 23, 2018).

Ikehata, K., Zhao, Y., Kularni, H. V., Komore, A. T., Cottrell, B. A., Anderson, M. A., Snyder, S. A., 32nd Annual WateReuse Symposium, "Characterization of photobiologically-treated reverse osmosis concentrate from advanced water reclamation facilities," Phoenix, AZ, United States. (September 10, 2017).

Ikehata, K., Zhao, Y., Ma, J., Komor, A. T., Maleky, N., Anderson, M. A., 11th IWA International Conference on Water Reclamation and Reuse, "A novel photobiological process for reverse osmosis concentrate treatment using brackish water diatoms," Long Beach, CA, United States. (July 23, 2017).

Ikehata, K., 27th Annual Conference on Ozone Science and Technology in Japan, "International Ozone Association – Pan American Group (IOA-PAG) Activity Report 2018.," Hiroshima, Japan. (June 21, 2017).

Ikehata, K., Zhao, Y., Kulkarni, H. V., 26th Annual Conference on Ozone Science and Technology in Japan, "Application of ozone in wastewater treatment – Use in potable reuse (in Japanese)," Tokyo, Japan. (June 15, 2017).

Ikehata, K., Isaji, C., Kakinuma, M., Yamamura, S., 25th Annual Conference on Ozone Science and Technology, "Role of ozone in advanced water treatment and advanced water purification – Japanese and North American perspectives (in Japanese)," Kyoto, Japan. (May 26, 2017).

Ikehata, K., Komor, A. T., Li, Y., Kleinheinz, J. A., Lee, D. S., CA-NV AWWA Annual Spring Conference, "Removal of hydrogen sulfide by biological filtration: Impacts of filter media, electron acceptors and microbiology," Anaheim, CA, United States. (April 10, 2017).

Ikehata, K., Isaji, C., Yamamura, S., 25th Annual Conference on Ozone Science and Technology in Japan, "Combination of ozonation with slow sand or rapid sand filtration (in Japanese)," Kyoto, Japan. (May 26, 2016).

Ikehata, K., Overby, J., 25th Annual Conference on Ozone Science and Technology in Japan, "IOA Pan American Group activity report – 2016 (in English with Japanese translation)," Kyoto. (May 26, 2016).

Ikehata, K., Isaji, C., Kakinuma, M., Yamamura, S., The 25th Annual Conference on Ozone Science and Technology in Japan, "Role of ozone in advanced water treatment and advanced water purification – Japanese and North American perspectives (in Japanese),," Kyoto, Japan. (May 26, 2016).

Ikehata, K., The 45th Western Regional Meeting of the American Chemical Society, "Enzymatic treatment of dye wastewater using fungal laccases and peroxidases – An overview," San Marcos, CA, United States. (November 6, 2015).

Ikehata, K., Komor, A. T., Li, Y., Qu, X., Kleinheinz, J., Lee, D. S., Trussell, C. B., Hokanson, D. R., 2015 CA-NV AWWA Annual Fall Conference, "Removal of hydrogen sulfide from groundwater by granular activated carbon," Las Vegas, NV, United States. (October 26, 2015).

Ikehata, K., Wang-Staley, L., Qu, X., Li, Y., The International Ozone Association-Pan American Group Annual Conference & Expo – Dallas, Texas 2015, "Advanced oxidation treatment of groundwater contaminated with 1,4-dioxane, tetrahydrofuran, and chlorinated volatile organic compounds," Dallas, TX, United States. (September 20, 2015).

Ikehata, K., 24th Annual Conference on Ozone Science and Technology in Japan, "Remediation of contaminated groundwater with advanced oxidation processes (in Japanese)," Tokyo, Japan. (May 28, 2015).

Ikehata, K., Mizuno, T., Ishi, K., Yamamura, S., Takahara, H., International Ozone Association-Pan American Group Annual Conference & Expo, "Introduction to the Japan Ozone Association's new project toward promotion of ozone technologies in drinking water treatment in Japan," Montreal, Quebec, Canada. (2014).

Ikehata, K., Jin, Y., Contruvo, J. A., Yamamura, S., The 23rd Annual Conference on Ozone Science and Technology in Japan, "Recent progress on bromate control during ozone water treatment (in Japanese)," Tokyo. (2014).

Ikehata, K., Jin, Y., Yamamura, S., Cotruvo, J. A., International Ozone Association-Pan American Group Annual Conference & Expo, "Recent progress on bromate control in water treatment," Montreal, Quebec, Canada. (2014).

Ikehata, K., Jin, Y., Yamamura, S., Cotruvo, J. A., The International Ozone Association-Pan American Group Annual Conference & Expo, "Recent progress on bromate control in water treatment," Montreal, Quebec, Canada. (August 2014).

Ikehata, K., Jin, Y., Yamamura, S., Cotruvo, J. A., 23rd Annual Conference on Ozone Science and Technology in Japan, "Recent progress on bromate control during ozone water treatment (in Japanese)," Tokyo. (August 7, 2014).

Ikehata, K., Jin, Y., Komor, A. T., 2014 CA-NV AWWA Annual Spring Conference, March 24-27, 2014, "Iron and manganese removal by chemical oxidation and filtration.," Anaheim, CA. (March 24, 2014).

Ikehata, K., Komor, A. T., Jin, Y., Peterson, J. D., Camarena, E., Maleky, N., 2013 World Congress & Exhibition, International Ozone Association & International Ultraviolet Association, "Ozone applications in golf course irrigation water treatment," Las Vegas, NV, United States. (September 22, 2013).

Ikehata, K., 22nd Annual Conference on Ozone Science and Technology in Japan, "New toxicological data on low dose bromate carcinogenicity (in Japanese)," Tokyo, Japan. (August 8, 2013).

Ikehata, K., Komor, A. T., 22nd Annual Conference on Ozone Science and Technology in Japan, "Ozone treatment of surface water in Anaheim, California (in Japanese)," Tokyo, Japan. (August 8, 2013).

Ikehata, K., Komor, A. T., Anderson, M. A., Cooper, W. J., 2013 CA-NV AWWA Annual Spring Conference, "Year-round bottom water withdrawal and treatment for minimizing the impact of anoxia and algal blooms," Las Vegas, NV, United States. (March 25, 2013).

Ikehata, K., Wang, L., Nessl, M. B., Komor, A. T., Cooper, W. J., McVicker, R. R., 2012 International Ozone Association Pan American Group Annual Conference and Exposition, "Revisiting ozonation for colored groundwater treatment – The impact of the ammonia-free chlorine process for bromate control," Milwaukee, WI, United States. (2012).

Ikehata, K., Wang, L., Nessl, M. B., Komor, A. T., Cooper, W. J., McVicker, R. R., 2012 International Ozone Association Pan American Group Annual Conference and Exposition, "Revisiting ozonation for colored groundwater treatment – The impact of the ammonia-free chlorine process for bromate control.," Milwaukee, WI, United States. (September 23, 2012).

Ikehata, K., Komor, A. T., 21st Annual Conference on Ozone Science and Technology in Japan, "Applications of ozone oxidation in groundwater treatment in Southern California (in Japanese)," Hiroshima. (June 21, 2012).

Ikehata, K., Komor, A., Anderson, M., 2nd North American Conference on Ozone, Ultraviolet & Advanced Oxidation Technologies, "Mitigation of anoxic hypolimnetic water in a drinking water reservoir by bottom water withdrawal and treatment – Bench-scale ozone test and full-scale water treatment," Toronto, Ontario, Canada. (September 19, 2011).

Ikehata, K., Komor, A. T., Trussell, C. B., Hokanson, D. R., Lee, D. S., Kleinhenz, J. A., 2015 American Water Works Association Annual Conference and Exposition (ACE15), "Biological hydrogen sulfide removal by granular activated carbon filtration Pilot- and full-scale studies.," Anaheim, CA, United States. (June 7, 2010).

Ikehata, K., El-Din, M. G., 2007 Canadian Oil Sands Network for Research and Development (CONRAD) Water Usage Workshop and Seminar, "Water treatment and reclamation for oil sands process-affected waters," Calgary, Alberta, Canada. (November 21, 2007).

Ikehata, K., Sadek, A., Wang, Y., El-Din, M. G., OSTRF 3rd Graduate Student – Industry Interaction Day Workshop, "Water treatment options and their applicability to oil sands operations for reuse and safe discharge," Edmonton, Alberta, Canada. (September 27, 2007).

Ikehata, K., El-Din, M. G., Synder, S. A., International Ozone Association-International Ultraviolet Association Joint World Congress, "Ozonation and advanced oxidation treatment of emerging organic pollutants in water and wastewater," Los Angeles, CA, United States. (August 27, 2007).

Ikehata, K., El-Din, M. G., OSTRF 2nd Graduate Student – Industry Interaction Day Workshop, "Water treatment options and their applicability to oil sands operations for reuse and safe discharge," Edmonton, Alberta, Canada. (September 28, 2006).

Ikehata, K., El-Din, M. G., Smith, D. W., Wang, W., American Water Works Association Annual Conference and Exposition (ACE06), "Destruction of cyanobacteria toxin by ozone.," San Antonio. (June 10, 2006).

Ikehata, K., El-Din, M. G., Pharmaceuticals and Endocrine Disruptors Workshop at the Edmonton Waste Management Centre of Excellence, "Treatment of estrogenic endocrine disrupting compounds in wastewater by advanced oxidation processes," Edmonton, Alberta, Canada. (May 18, 2006).

Ikehata, K., El-Din, M. G., Smith, D. W., Momani, F. A., Wang, D. W., 2nd Annual AICWR Research Conference, "Application of ozone treatment for the destruction of two cyanobacteria toxins: MC-LR and –RR. Alberta Ingenuity Centre for Water Research," Calgary, Alberta. (October 29, 2005).

Ikehata, K., Buchanan, I. D., Smith, D. W., 225th the American Chemical Society National Meeting, Biochemical Technology Division Symposia, "Enzymatic treatment of phenol with crude fungal peroxidase from Coprinus species," New Orleans, LA, United States. (March 23, 2003).

Ikehata, K., Buchanan, I. D., Environmental Chemistry Division Symposia, "Removal of phenols from oil refinery wastewater with extracellular fungal peroxidase and hydrogen peroxide.," 224th the American Chemical Society National Meeting, Boston, MA, United States. (2002).

Ikehata, K., Buchanan, I. D., Zytner, R. G. (Editor), Stiver, W. H. (Editor), Joint CSCE/EWRI of ASCE International Conference on Environmental Engineering, "Screening of Coprinus species for the production of extracellular peroxidase and evaluation of its applicability to the treatment of aqueous phenol.," Canadian Society for Civil Engineering, Montreal, Ontario, Canada. (2002).

Ikehata, K., Nicell, J. A., 34th Central Canadian Symposium on Water Pollution Research, "Characterisation of tyrosinase enzyme for the treatment of aqueous phenols," Burlington, Ontario, Canada. (February 8, 1999).

2. Invited Talks, Lectures, and Presentations:

Ikehata, K. (Panelist), Milczarek, M. (Panelist), Golab, J. (Panelist), Council, L. (Moderator), Water for Texas 2025 Conference, "Filtered Down: Exploring Wastewater Reclamation for Aquifer Management," Texas Water Development Board, AT&T Hotel and Conference Center, Austin, TX, United States. (January 28, 2025).

Ikehata, K., UTSA Earth & Planetary Sciences Fall 2024 Seminar Series, "Boosting Freshwater Production at Brackish Water Desalination and Potable Reuse Facilities Using Brackish Diatoms and Secondary Reverse Osmosis," University of Texas at San Antonio, Department of Earth & Planetary Sciences, UTSA, San Antonio, TX, United States. (October 25, 2024).

Ikehata, K., 7th Annual WIN Workshop, "From Bench to Pilot: Enhanced Water Recovery at Brackish Groundwater Desalination and Advanced Water Purification Facilities Using Brackish Diatoms and Secondary Reverse Osmosis," Bureau of Reclamation, Brackish Groundwater National Desalination Research Facility, Alamogordo, NM, United States. (October 24, 2024).

Ikehata, K., Chemistry & Biochemistry Fall 2024 Seminar Series, "Squeezing More Freshwater from Brackish and Reclaimed Water Using Brackish Diatoms and Secondary Reverse Osmosis," Texas State University, Department of Chemistry &

Biochemistry, Texas State University, San Marcos, TX, United States. (October 21, 2024).

Ikehata, K., 2024 Digital 360 Summit, "Smart Water Panel," 512 CMG, Austin, TX, United States. (September 24, 2024).

Ikehata, K., 2024 Texas Rural Water Association Water Forum, "Sustainable Water Resources Management for Rural Texas: One Water and Direct Potable Reuse," Texas Rural Water Association, Roundrock, TX, United States. (September 19, 2024).

Ikehata, K., Innovation Summit, "Direct Potable Reuse in San Marcos, TX," Greater San Marcos Partnership, San Marcos, TX, United States. (July 11, 2024).

Ikehata, K., Rotary Club of San Marcos, General Meeting, "One Water TXST: Promoting Public Acceptance of Direct Potable Reuse: Safeguarding Water Quality & Aesthetics," Rotary Club of San Marcos, San Marcos, TX, United States. (July 11, 2024).

Ikehata, K., TAWWA-WEAT South Texas Chapter June Meeting, "Promoting Public Acceptance of Direct Potable Reuse: Safeguarding Water Quality & Aesthetics," Texas AWWA-Water Environment Association of Texas-South Texas Chapter, San Antonio, TX, United States. (June 27, 2024).

Ikehata, K., ACS Pittsburgh Local Section Environmental Lecture Series, "Water Reuse – The Solution for Sustainable Water Resources Management from the Earth to Moon & Mars," Pittsburgh ACS. (June 3, 2024).

Ikehata, K., Texas AWWA Water Science & Research Division Webcast, "Providing Texas with Sustainable Water from Reverse Osmosis Concentrate Using Diatoms – A Bench to Pilot Project," Texas AWWA. (February 29, 2024).

Ikehata, K., Texas A&M University Zachry Department of Civil & Environmental Engineering CVEN 681 Spring Seminar Series, "Promoting Public Confidence Towards Direct Potable Reuse Through Online Monitoring of Pathogens and Disinfection Byproducts and Sensory and Instrumental Analysis of Aesthetics," Texas A&M University, College Station, TX, United States. (February 12, 2024).

Ikehata, K., Wichita Falls-Duncan ACS Meeting, "Beyond Boundaries: A Water Odyssey from Japan to Canada, and now Texas, Polymer Chemistry to Civil Engineering," Wichita Falls-Duncan American Chemical Society, Midwestern State Uiversity, Wichita Falls, TX, United States. (November 30, 2023).

Ikehata, K., Annual US Water Treatment Conference, "Approaches to Sustainable Water Resources Management: Direct Potable Reuse Pilot Studies in Central Texas," LMN Power, Houston, TX, United States. (October 26, 2023).

Ikehata, K., Leadership Education Session, "Advanced Water Purification & Potable Reuse Pilot Studies in Central Texas," Texas Nursery & Landscape Association, City

of San Marcos Public Services Complex, San Marcos, TX, United States. (October 24, 2023).

Ikehata, K., Texas Water Utility Association, Armadillo Section Meeting, "Pilot-scale Advanced Water Purification System for Potable Water Reuse," Texas Water Utility Association, City of San Marcos Public Services Complex, San Marcos, TX, United States. (April 19, 2023).

Ikehata, K., TAWWA-TXST Chapter February General Meeting, "Looking for a Job," Texas AWWA-Texas State Chapter, Texas State University, San Marcos, TX, United States. (February 15, 2023).

Ikehata, K., FY2022 JDA Forum, "Potable Water Reuse in the United States," Japan Desalination Association, Virtual. (December 13, 2022).

Ikehata, K., The US Water Treatment Conference, "Approaches to Sustainable Water Resources Management in Texas: One Water to Two Waters," LMN Power, Houston, TX, United States. (November 3, 2022).

Ikehata, K., The 5th Annual WIN Workshop, "Enhanced Water Recovery by a Combination of Photobiological Process and Secondary Reverse Osmosis–Lifecycle Cost Analysis and Mini-Pilot Study (R21AC10106)," Bureau of Reclamation, Brackish Groundwater National Desalination Research Facility, Alamogordo, NM, United States. (September 20, 2022).

Ikehata, K., Espindola, C. A., Adams, J. Hunter, Steinle-Darling, E., TAWWA/WEAT San Antonio Summer Seminar, "Augmentation of Reclaimed Water with Excess Urban Stormwater: A Better Way to Non-RO Direct Potable Reuse in Texas?," TAWWA-WEAT San Antonio Section, San Antonio, TX, United States. (July 22, 2022).

Ikehata, K., IPWEE Workshop, "Potable Water Reuse in the United States and Online Monitoring Technologies," Society of International Promotion for Water Environmental Engineering, Virtual. (March 11, 2022).

Ikehata, K., The 28th Water Reuse Symposium, "Water Reuse in the United States," Water Reuse Promotion Center (Tokyo, Japan), Virtual, Tokyo, Japan. (February 2022).

Ikehata, K., 57th Texas ASABE Annual Meeting, "Brackish Diatoms Improve Fresh Water Recovery in Desalination and Advanced Water Purification," Texas Section American Society of Agricultural and Biological Engineers, College Station, TX, United States. (October 28, 2021).

Ikehata, K., Digital 360 Summit 2021, "Water & Smart Technologies Panel," CMG - CIEDAR, San Marcos, TX, United States. (September 1, 2021).

Ikehata, K., The 38th Ozone Technology Workshop, "Potable Water Reuse in the United States and Ozone Treatment," Japan Ozone Association, Zoom. (December 11, 2020).

Ikehata, K., The 40th Annual Research Workshop of the Japanese Society of Diatomology, "Diatoms and Water Production - Brackish Diatoms Will Save the Water Shortage in the United States," The Japanese Soceity of Diatomology, Zoom. (December 6, 2020).

Ikehata, K., Deloitte SoCal Green Team Speaker Session, "Water is Life – Sustainable Use of Water Resources for the 21st Century & Beyond," Deloitte, Zoom. (November 13, 2020).

Ikehata, K., Digital 360 Summit 2020, "Smart Water Panel," CMG - CIEDAR, Zoom. (August 20, 2020).

Ikehata, K., 2020 Annual Seminar, "Enhanced Water Recovery in Brackish Groundwater Desalination and Advanced Water Purification by Photobiological Treatment Followed by Secondary RO," Capital Area Chapter, Texas Section American Water Works Association, Hornsby Bend Environmental, Austin, TX, United States. (February 27, 2020).

Ikehata, K., 2nd Annual WIN Workshop, "Photobiological Treatment of Brackish Water and Wastewater – Applications in RO Brine Management," U.S. Bureau of Reclamation, Brackish Groundwater National Desalination Facility (BGNDRF), Alamogordo, NM, United States. (October 28, 2019).

Ikehata, K., UCLA Chapter American Water Works Association, "Journey to IPR/DPR 2009-2019," University of California, Los Angeles, CA, United States. (January 31, 2019).

Ikehata, K., Chemistry Career Club Seminar, "Developing a Novel Photobiological Water Treatment Process Using Brackish Water Diatoms," California State University, Stanislaus, Turlock, CA, United States. (October 12, 2018).

Ikehata, K., CEE Seminar, "Recovering More Usable Water and Reducing Concentrate with Photobiological Treatment Followed by Secondary Reverse Osmosis," University of California, Riverside, Riverside, CA, United States. (June 1, 2018).

Ikehata, K., AWWA Joint Section Research Committee Webinar Series, "Photobiological treatment of reverse osmosis concentrate using brackish water diatoms and natural sunlight.." (March 23, 2018).

Ikehata, K., "Development of a Novel Water Treatment Technology Using Brackish Water Diatoms," Faculty of Marine Bioscience, Fukui Prefectural University, Obama, Fukui, Japan. (June 8, 2017).

Ikehata, K., Mitsubishi Electric Corporation, "Innovative Water Projects – From Ozone Water Treatment to Water Reuse," Amagasaki, Hyogo. (June 7, 2017).

Ikehata, K., Chemistry and Biochemistry Careers Class, "20 Years of Research in Chemistry – From Polymer Synthesis to Water Reuse," California State University Fullerton, Fullerton, CA, United States. (April 7, 2017).

Ikehata, K., 34th Ozone Technology Workshop, "Recent progress in wastewater treatment using ozone in the United States (in Japanese)," Tokyo. (December 1, 2016).

Ikehata, K., Chemistry and Biochemistry Careers Class, "20 Years of Research in Chemistry – From Polymer Synthesis to Water Reuse," California State University Fullerton, Fullerton, CA, United States. (November 4, 2016).

Ikehata, K., 2nd Annual Department of Chemistry and Biochemistry Alumni Day, "20 Years of Research in Chemistry – From Polymer Synthesis to Water Reuse," California State University Fullerton, Fullerton, CA, United States. (April 8, 2016).

Ikehata, K., Swing Corporation, "Living as a Global Researcher – From Japan to North America & Beyond," Tokyo, Japan. (May 26, 2015).

Ikehata, K., Research Seminar at the Research Center for Environmental Quality Management, "Water Resources Management in Southern California – Drought and Water Reuse," Kyoto University, Otsu Shiga, Japan. (May 23, 2015).

Ikehata, K., The 23rd Annual Conference on Ozone Science and Technology in Japan, "Applications of advanced oxidation processes in water reuse (Invited Speech in Japanese)," Tokyo, Japan. (August 7, 2014).

Ikehata, K., American Chemical Society Orange County Section Environmental Group Monthly Presentation, "Low dose risks from bromate: Chemistry and modes of action – Introduction to the Water Research Foundation report # 4042 by Joseph Cotruvo et al," Irvine, CA, United States. (April 25, 2013).

Ikehata, K., AMERICANA 2013 International Environmental Technology Trade Show and Conference, "[on behalf of Dr. Joseph A. Cotruvo] Bromate risk at high and low doses from drinking water," Montreal, Quebec, Canada. (March 19, 2013).

Ikehata, K., or the Society of Environmental Engineers Meeting, "Introduction to Environmental Engineering Careers," California State University Fullerton, Fullerton, United States. (November 7, 2012).

Ikehata, K., For the Department of Civil & Environmental Engineering Student Society, "Being Abroad for 14 Years," University of California, Irvine, Irvine, CA, United States. (March 25, 2011).

3. Consultancies:

For Profit Organization, Aquatic Studio, Orange, CA, United States. (February 2022 - Present).

For Profit Organization, Water Reuse Promotion Center - Japan, Tokyo, Japan. (July 2018 - Present).

For Profit Organization, Metawater USA, Rutherford, NJ, United States. (May 2019 - July 2019).

For Profit Organization, Swing Corporation, Tokyo, Japan. (September 2014).

4. Workshops:

Ikehata, K., WEFTEC 2025, "Exploring Disinfection Validation in Water Reuse Scenarios - Ozone-Based Processes," Water Environment Federation, Chicago, IL, United States. (September 27, 2025).

5. Other Works not in Print:

a. Works "submitted" or "under review":

Book Chapters:

Dietrich, A. M., Adams, J. H., Burlingame, G., Devesa, R., Furatian, L., Ikehata, K., & Southerland, J. (Submitted / Under Review). Chapter 8: Taste, Odor, and Appearance. In *M68 Water Quality in Distribution Systems, 2nd Edition*. American Water Works Association. (June 2024)

Kaymak, B., Ikehata, K., & Momorella, A. (Submitted / Under Review). Chapter 12: Future Trends in Ozone Systems. In *M88 Ozone Systems for Drinking Water, Wastewater and Water Reuse Applications, 1st Edition*. American Water Works Association. (April 2024)

Journal Articles:

Leontieff, D. A., Ikehata, K., Inanaga, Y., & Furukawa, S. (Submitted / Under Review). Applications of Ozonation and Ozone-Based Advanced Oxidation Processes in Industrial Wastewater Treatment – A Review. *Ozone: Science & Engineering*. (July 2024)

Roy, E., Palmer, J. A., Asiabanpour, B., Kim, Y. J., & Ikehata, K. (Submitted / Under Review). Lifecycle cost analysis of the diatom photobioreactor-secondary reverse osmosis process for enhanced water recovery at a brackish groundwater desalination facility. *Water Practice and Technology*. (April 2024)

Adams, J. H., Fulton, C., Thomas, D., Dilparic, D., Ganegoda, S., Burlingame, G., … Ikehata, K. (Submitted / Under Review). Promote Industry Careers Through Water Sector and Academia Partnerships. *Journal American Water Works Association*. (January 2024)

Magazine / Trade Publications:

Ash, S., Adams, J. H., Southard, M., Blake, S., Thomas, D., Fischer, J., … Ikehata, K. (2024, October). Operators Need to Know Wastewater Treatment Processes. *Opflow*. Submitted / Under Review.

Reports:

Ikehata, K., Gao, H., Palmer, J. A., & Roy, E. (Submitted / Under Review). *Enhanced Water Recovery by a Combination of Photobiological Process and Secondary Reverse Osmosis–Lifecycle Cost Analysis and Mini-Pilot Study*. Denver, CO, USA: US Bureau of Reclamation. (May 2024)

b. Works "in progress":

Journal Articles:

Zhu, C., Jin, T., & Ikehata, K. (In Preparation; Not Yet Submitted). Advanced Potable Water Reuse Integrating with Renewal Energy: A Data-Driven Study for San Marcos.

c. Other Works Not in Print:

Keynote / Plenary Addresses:

Ikehata, K., 1st Global Symposium on Water Cycle, "Potable Water Reuse in California and Texas: The Forefront," Committee of Water Treatment and Reuse, Chinese Society for Environmental Sciences. (September 2, 2021).

Ikehata, K., Gamal El-Din, M., Synder, S. A., International Ozone Association-International Ultraviolet Association Joint World Congress, "Ozonation and advanced oxidation treatment of emerging organic pollutants in water and wastewater.," Los Angeles, CA, United States. (2007).

Posters:

Shankar, O., Ashraf, A., Ikehata, K., 2025 WateReuse Texas Conference, "Simulating Blended Alternative Water Sources for Potable Reuse: A Monte-Carlo Based Analysis," WateReuse Texas, Houston, TX, United States. (September 17, 2025).

Ikehata, K., Vasquez, J., Palmer, J. A., Roy, E., Underwood, M. S., Gao, H., ACS Fall 2025 Meeting, "Resource Recovery from Diatom Biomass: Unlocking Valuable Materials from Photobiological Treatment of Reverse Osmosis Concentrate," American Chemical Society, Washington, DC, United States. (August 20, 2025).

Ikehata, K., Espindola, C. A., Leontieff, D. A., Fujioka, T., Kodamatani, H., Kite, P., Shropshire, P., American Water Works Association Annual

Conference and Exposition (ACE15), "Direct Potable Water Reuse Pilot Study with Novel Online Analyzers for Disinfection By-products and Bacteria," American Water Works Association, Toronto, ON, Canada. (June 12, 2023).

Roy, E., Gonzalez, S., Underwood, M., Ikehata, K., Texas Water 2023, "Lifecycle Cost Analysis of Novel Photobiological Process Followed by Secondary Reverse Osmosis for Enhanced Freshwater Recovery at Brackish Water Desalination Facility," Texas Water Works Association-Water Environment Association of Texas, Houston, TX, United States. (April 12, 2023).

Ikehata, K., Espindola, C. A., Adams, J. Hunter, Steinle-Darling, E., Texas Water 2022, "Augmentation of Reclaimed Water with Excess Urban Stormwater: A New Holistic Approaches to Sustainable Water Resources Management for Central Texas(?)," Texas Water Works Association-Water Environment Association of Texas, San Antonio, TX, United States. (April 7, 2022).

Palmer, J. A., Adams, H., Kulkarni, H. V., Datta, S., Ikehata, K., 2022 Membrane Technology Conference, "Freshwater Recovery From Brackish Groundwater RO Concentrate via Photobiological Treatment and Secondary RO," American Membrane Technology Association-American Water Works Association, Las Vegas, NV, United States. (February 23, 2022).

Palmer, J. A., Gao, H., Walker, D. M., Huynh, P., Ikehata, K., 2021 Membrane Technology Conference, "Enhanced Water Recovery by a Combination of Photobiological Process and Secondary Reverse Osmosis," American Membrane Technology Association, American Water Works Association, West Palm Beach, FL, United States. (July 21, 2021).

Ikehata, K., Kulkarni, H. V., Zhao, Y., Li, Y., IWA World Water Congress & Exhibition 2018, "Enhanced fresh water recovery from brackish groundwater RO concentrate by a photobiological process and secondary RO," Tokyo, Japan. (September 16, 2018).

Ikehata, K., Sheng, Z., Sun, R. N., Liang, J., Fayant, P., Stuart, D. T., Liu, Y., International Water Association- World Water Congress and Exhibition, "Biochemical investigation on the antibacterial activity of aqueous nano-C60 against Escherichia coli," Montreal, Quebec, Canada. (September 19, 2010).

Ikehata, K., Yang, H., Xiao, J., El-Din, M. G., Buchanan, I., Bromley, D., Alberta Ingenuity Centre for Water Research, 3rd Annual AICWR Research Conference, "Land application of pre-treated liquid swine manure," Edmonton, Alberta, Canada. (November 3, 2006).

Patents:

Ikehata, Keisuke, Komor, Andrew T. "Method for treating contaminated water". United States. Number / ID: US9416036 B2. (Date Awarded: 2016).

C. Scholarly / Creative Grants and Contracts:

1. Funded External Grants and Contracts:

Ikehata, Keisuke, Percent Contribution: 100%. Pilot Testing of a Novel Biocide for Biofouling Control and Disinfection By-product Reduction in a RO-Based Advanced Water Purification Facility, Organo Corporation, Private / Foundation / Corporate, $125,000.00. (Funded: September 2025 - Present). Sponsored Research.

Ikehata, Keisuke. Direct Potable Reuse Study, Dripping Springs Water Supply Corporation, Private / Foundation / Corporate, $12,000.00. (Funded: May 2024 - Present). Gift.

Wilde, William James (Principal), Ikehata, Keisuke (Supporting), Aguayo, Federico Macias (Supporting), Konur, Dincer (Supporting), Dong, Zhijie (Supporting), Ozbakkaloglu, Togay (Supporting), Torres, Anthony S (Supporting), Wang, Feng (Supporting), Yoo-Jae, Kim (Supporting). Master Contract Proposal, Minnesota Department of Transportation, State. (Submitted: November 2019, Funded: January 24, 2020 - Present). Contract.

Ikehata, Keisuke (Principal), Percent Contribution: 100%. Pilot Photobioreactor Development for Scalant Removal and Enhanced Water Recovery from Brackish Reverse Osmosis Concentrate, U.S. Bureau of Reclamation, Federal, $250,000.00. (Submitted: November 15, 2023, Funded: September 2024 - September 2027). Grant.

Ikehata, Keisuke, Percent Contribution: 100%. Consultation for the International Standardization of Water Reuse and Investigation of New Advanced Technologies in Water and Wastewater Treatment, Mitsubishi Electric Corporation, Private / Foundation / Corporate, $13,300.00. (Funded: August 2025 - March 31, 2026). Sponsored Research.

Ikehata, Keisuke, Percent Contribution: 100%. Consultation for the International Standardization of Water Reuse and Investigation of New Advanced Technologies in Water and Wastewater Treatment, Mitsubishi Electric Corporation, Private / Foundation / Corporate, $13,300.00. (Funded: April 20, 2024 - March 31, 2025). Sponsored Research.

Ikehata, Keisuke (Principal), Percent Contribution: 100%. Strategies for Gaining Pathogen Removal Credit for Reverse Osmosis in Potable Reuse in Texas (and Beyond), Freese and Nichols / Bureau of Reclamation, Private /

Foundation / Corporate, $19,949.00. (Submitted: November 16, 2022, Funded: January 5, 2024 - November 2024). Grant.

Ikehata, Keisuke (Principal), Percent Contribution: 100%. Development of Multi-parameter Direct Water Quality Monitoring System to Achieve the Circular Society for Water, US Bureau of Reclamation, Federal, $149,999.00. (Submitted: June 16, 2020, Funded: July 1, 2021 - September 30, 2024). Grant.

Ikehata, Keisuke. Consultation for the International Standardization of Water Reuse and Investigation of New Advanced Technologies in Water and Wastewater Treatment, Mitsubishi Electric Corporation, Private / Foundation / Corporate, $18,940.00. (Funded: May 22, 2023 - March 31, 2024). Sponsored Research.

Ikehata, Keisuke (Principal), Percent Contribution: 100%. Enhanced Water Recovery by a Combination of Photobiological Process and Secondary Reverse Osmosis – Lifecycle Cost Analysis and Mini-Pilot Study, U.S. Bureau of Reclamation, Federal, $250,000.00. (Funded: January 1, 2021 - December 31, 2023). Grant.

Ikehata, Keisuke. Consultation for the International Standardization of Water Reuse and Investigation of New Advanced Technologies in Water and Wastewater Treatment, Mitsubishi Electric Corporation, Private / Foundation / Corporate, $15,897.00. (Funded: April 20, 2022 - March 31, 2023). Sponsored Research.

Ikehata, Keisuke (Principal), Percent Contribution: 100%. Consultation for the International Standardization of Water Reuse and Investigation of New Advanced Technologies in Water and Wastewater Treatment, Mitsubishi Electric Corporation, Private / Foundation / Corporate, $9,100.00. (Funded: October 5, 2021 - March 31, 2022). Sponsored Research.

Ikehata, Keisuke (Principal), Percent Contribution: 100%. New Application Survey of Water and Wastewater Treatment Using Ozonation, Mitsubishi Electric Corporation, Private / Foundation / Corporate, $18,470.00. (Submitted: November 11, 2020, Funded: January 18, 2021 - March 31, 2021). Sponsored Research.

Ikehata, Keisuke (Principal), Percent Contribution: 100%. New Application Survey of Water and Wastewater Treatment Technologies Using Ozonation and Advanced Oxidation Process, Mitsubishi Electric Corporation, Private / Foundation / Corporate, $18,500.00. (Funded: November 2019 - March 31, 2020). Sponsored Research.

Ikehata, Keisuke. Development of Novel Photobiological Process to Improve Water Recovery in Brackish Groundwater Desalination, U.S. Bureau of Reclamation, Federal, $100,000.00. (Funded: January 2017 - March 2018). Grant.

Ikehata, Keisuke. A Novel Photobiological Water Treatment Process for More Efficient Water Recovery in Advanced Water Reclamation and Brackish Groundwater Desalination Facilities, National Science Foundation, Small Business Innovation Research, Phase I, Federal, $225,000.00. (Funded: January 2017 - December 2017). Grant.

Ikehata, Keisuke, Liu, Y, El-Din, M Gamal, Li, H. Comparison of Deionization Technologies for the Treatment of Basal Depressurization Water and Oil Sands Process-Affected Water, CONRAD Bitumen Production Fundamental Research Group, Private / Foundation / Corporate, $80,500.00. (Funded: September 2009 - August 2011). Grant.

2. Submitted, but not Funded, External Grants and Contracts:

Asiabanpour, Bahram (Principal), Ikehata, Keisuke (Co-Principal), Zamanian, Amir Hosein (Co-Principal), Aslan, Semih (Co-Principal), Faroughi, Salah Aldin (Co-Principal), Ozbakkaloglu, Togay (Co-Principal). The Martian Center: A Collaborative Research Hub for Space Innovating and Cultivating Solution for Martian Settlement, NASA-MIRO, Federal, $5,000,000.00. (Submitted: 2024, Funded: 2024 - 2029). Grant.

Asiabanpour, Bahram (Principal), Zamanian, Amir Hosein (Co-Principal), Ikehata, Keisuke (Co-Principal). Space Pioneers Coalition: An Inclusive Engineering Research Coalition for Advancing NASA's Exploration, NASA, Federal, $1,200,000.00. (Submitted: 2024, Funded: January 1, 2025 - December 31, 2027). Grant.

Menezes De Carvalho, Marcelo (Principal), Percent Contribution: 8%, Tesic, Jelena (Co-Principal), Percent Contribution: 3%, Ikehata, Keisuke (Co-Principal), Percent Contribution: 3%, Liu, Xiangping (Co-Principal), Percent Contribution: 3%. F.L.A.S.H. - Flash-Flood Local Alert & Safety Hub, United States Department of Agriculture, National Institute of Food and Agriculture, Federal, $299,542.62. (Submitted: September 12, 2025). Grant.

Ikehata, Keisuke (Principal), Percent Contribution: 100%. One Water TXST: Development of Pilot-Scale Direct Potable Reuse System with Combined Reclaimed Water, Rainwater, and Condensate without Brine Waste Generation, U.S. Bureau of Reclamation, Federal, $399,730.76. (Submitted: November 13, 2024). Grant.

Ikehata, Keisuke, Percent Contribution: 100%. Technical Consultation for the Indirect Potable Reuse Project in Santiago de Querétaro, Mexico, Mitsui & Co. Infrastructure Solutions, Private / Foundation / Corporate, $46,025.42. (Submitted: August 13, 2024). Sponsored Research.

Konur, Dincer (Principal), Percent Contribution: 40%, Musal, Rasim M (Co-Principal), Percent Contribution: 40%, Ikehata, Keisuke (Co-Principal), Percent Contribution: 20%. Data Analysis for Enerflex, Exterran Energy

Solutions, L.P., Private / Foundation / Corporate, $65,973.00. (Submitted: June 2024). Sponsored Research.

Ikehata, Keisuke (Principal), Percent Contribution: 100%. One Water TXST: Elevate the Public Awareness and Acceptance Towards Direct Potable Reuse and Sustainable Water Supply Through On-Campus Pilot Study, Water Research Foundation - Paul L. Busch Award, Private / Foundation / Corporate, $100,000.00. (Submitted: June 3, 2024). Grant.

Ikehata, Keisuke (Principal), Percent Contribution: 80%, Adams, J. Hunter (Co-Principal), Percent Contribution: 20%. Aesthetics of Purified Water for Direct Potable Reuse – Can We Satisfy Our Future Customers?, The Water Research Foundation, Private / Foundation / Corporate, $120,504.00. (Submitted: March 27, 2024). Grant.

Ikehata, Keisuke (Principal), Percent Contribution: 100%. Online Microbial Monitoring to Ensure the Safety of Direct Potable Reuse and Improve Customer Confidence, The Water Research Foundation, Private / Foundation / Corporate, $128,030.00. (Submitted: March 27, 2024). Grant.

Ikehata, Keisuke (Principal), Percent Contribution: 80%, Ameri, Farhad (Co-Principal), Percent Contribution: 10%, Scardaville, Melissa (Co-Principal), Percent Contribution: 10%. Water Guardians – Empowering Communities with Innovative and Simple Sensor-Based Solutions for Sustainable Water Quality Monitoring NSF Convergence Accelerator – Track L, Mälardalen University, Other, $473,838.00. (Submitted: August 21, 2023). Grant.

Ikehata, Keisuke (Principal), Percent Contribution: 100%. Determination of the Aesthetic Acceptability of Direct Potable Reuse: Is Purified Wastewater Tastier than Tap Water?, Water Research Foundation - Paul L. Busch Award, Private / Foundation / Corporate, $100,000.00. (Submitted: May 30, 2023). Grant.

Ikehata, Keisuke. Photobiological Treatment of Brackish Water Reverse Osmosis Concentrate – Pilot Reactor Development for Continuous Outdoor Operations Using Mixed Diatom Culture, Department of Interior - Bureau of Reclamation, Federal, $250,000.00. (Submitted: November 30, 2022). Grant.

Ikehata, Keisuke. CAREER: Optimization of Scalant Removal and Biomaterials Production in Brackish Diatom-Based Photobiological Treatment of Reverse Osmosis Concentrate, National Science Foundation, Federal, $549,301.00. (Submitted: July 25, 2022). Grant.

Ikehata, Keisuke. Augmentation of Reclaimed Water with Excess Urban Stormwater for Potable Reuse: Creating Resiliency Through the Combination of Underutilized Local Water Resources, Water Reserach Foundation, Private / Foundation / Corporate, $100,000.00. (Submitted: June 29, 2022). Grant.

Ikehata, Keisuke. Improving the Quality of Impaired Water Resources by Augmenting with Stormwater: A Better Way to Non-RO Direct Potable Reuse?, Water Research Foundation, Private / Foundation / Corporate, $138,442.00. (Submitted: March 30, 2022). Grant.

Ikehata, Keisuke. Screening and Evaluation of Isolated and Mixed Brackish Diatoms for the Treatment of Reverse Osmosis Concentrate, Water Research Foundation, Private / Foundation / Corporate, $116,941.00. (Submitted: March 30, 2022). Grant.

Ikehata, Keisuke (Principal), Percent Contribution: 60%, Adams, J. Hunter (Co-Principal), Percent Contribution: 20%, Steinle-Darling, Eva (Supporting), Percent Contribution: 20%. Improving the Quality of Impaired Water Resources by Augmenting with Storm Water – Potable Use Feasibility Study, Department of Interior, Bureau of Reclamation, Federal, $250,000.00. (Submitted: September 9, 2021). Grant.

Datta, Saugata (Principal), Percent Contribution: 34%, Kulkarni, Harshad Vijay (Co-Principal), Percent Contribution: 33%, Ikehata, Keisuke (Co-Principal), Percent Contribution: 33%. Removal of Inorganic Scalants (sulfate, carbonate, and calcium) using Microbial Sulfate Reduction Process to Improve Reverse Osmosis Based Brackish Groundwater Desalination, US Department of Interior, Bureau of Reclamation, Federal, $199,999.00. (Submitted: June 2021). Grant.

Tesic, Jelena (Principal), Ikehata, Keisuke (Co-Principal). Sensor data collection and AI modeling for raising awareness on environmental pollution in Serbia, U.S. DEPARTMENT OF STATE, Federal, $25,011.00. (Submitted: May 17, 2021). Grant.

Jin, Tongdan (Principal), Percent Contribution: 50%, Ikehata, Keisuke (Co-Principal), Percent Contribution: 50%. CDS&E: Data Intelligence for Planning Sustainable Manufacturing and Transport Infrastructure under Variable Resources, National Science Foundation, Federal, $198,903.00. (Submitted: September 15, 2020). Grant.

Hwang, Sangchul Scott, Ozbakkaloglu, Togay, Torres, Anthony S, Aslan, Semih, Ikehata, Keisuke. Electrically conductive pervious concrete for perdestrian and bicycle safety, TxDOT, State, $350,000.00. (Submitted: September 4, 2020). Grant.

Ikehata, Keisuke (Principal), Percent Contribution: 100%. CAREER: Molecular and Chemical Investigation of Dissolved Silica and Calcium Carbonate Removal from Reverse Osmosis Concentrate and Organic Byproduct Generation by Brackish Diatoms, National Science Foundation, Federal, $552,923.00. (Submitted: August 4, 2020). Grant.

Ikehata, Keisuke (Principal), Percent Contribution: 100%. Development of a Dual-Purpose Water Purification System for Direct Potable Use of Storm

Water and Reclaimed Water, W. M. Keck Foundation, Private / Foundation / Corporate. (Submitted: December 20, 2019). Grant.

Dong, Zhijie (Principal), Jimenez, Jesus (Co-Principal), Kim, Namwon (Supporting), Valles Molina, Damian (Supporting), Ikehata, Keisuke (Supporting), Chen, Yihong (Supporting), Koutitas, Georgios. REU Site: Multidisciplinary Research in Data-INFORMED Engineering Problems, National Science Foundation, Federal, $404,658.00. (Submitted: August 28, 2019). Grant.

3. Funded Internal Grants and Contracts:

Menezes De Carvalho, Marcelo (Principal), Tesic, Jelena (Co-Principal), Ikehata, Keisuke (Co-Principal), Liu, Xiangping (Co-Principal). F.L.A.S.H. - Flash Flood Local Alert & Safety Hub, Research Accelerator Program, Texas State University, $15,000.00. (Submitted: August 7, 2025, Funded: August 11, 2025 - Present). Grant.

Jin, Tongdan (Principal), Ikehata, Keisuke (Co-Principal), Zhu, Cheng (Co-Principal). Advanced Potable Water Reuse Integrating with Renewal Energy: A Data-Driven Study for San Marcos, Texas State University, $17,580.00. (Submitted: January 30, 2021, Funded: April 9, 2021 - Present). Grant.

Ikehata, Keisuke (Principal), Percent Contribution: 100%. Dual-Purpose Water Purification System for Direct Potable Use of Stormwater and Reclaimed Water – Feasibility Study, Texas State University, Texas State University, $8,000.00. (Submitted: October 2019, Funded: January 2020 - Present). Grant.

Rhodes, Christopher Peter (Principal), Martin, Benjamin (Co-Principal), Schilter, David (Co-Principal), Kerwin, Sean Michael (Co-Principal), Kornienko, Alexander Vladimir (Co-Principal), Peterson, Ryan Loren (Co-Principal), Schwartz, Benjamin F (Co-Principal), Dutton, Jessica (Co-Principal), Ikehata, Keisuke (Co-Principal), Hwang, Sangchul Scott (Co-Principal), Ozbakkaloglu, Togay (Co-Principal). Inductively Coupled Plasma-Mass Spectrometry Shared Research and Education Instrument, Texas State University, $259,195.00. (Funded: 2022 - 2023). Grant.

4. Submitted, but not Funded, Internal Grants and Contracts:

Ikehata, Keisuke, Percent Contribution: 50%, Meitzen, Kimberly Michelle, Percent Contribution: 50%. One Water TXST – Towards the First Full Scale On-Campus Direct Potable Reuse Project, Texas State University - Research Enhancement Program, Texas State University, $16,000.00. (Submitted: October 9, 2024). Sponsored Research.

O'Connell, Megan (Principal), Daniel, Kristy L (Supporting), Ikehata, Keisuke (Supporting). Shifting Phenology and Perspectives: Harnessing community science to quantify shifts in public perceptions of sustainability and

biodiversity conservation research., Texas State University, Texas State University, $123,992.00. (Submitted: January 2022). Grant.

D. Scholarly / Creative Fellowships, Awards, Honors:

Award / Honor Recipient: Division Best Article Award, American Water Works Association.
June 2024

Award / Honor Recipient: Reuse Impact Award, WateReuse Texas.
September 2023

Award / Honor Recipient: 2023 APEX Award, Awards for Publication Excellence (APEX).
July 2023

Fellowship Recipient: LBJ Institute Faculty Research Fellow 2021-2023, The LBJ Institute for STEM Education and Research, Texas State University.
August 2021 - March 2023

Fellowship Recipient: Graduate Intern Tuition Supplement, University of Alberta.
2000 - 2003

Award / Honor Recipient: Certificate of Merit Award, American Chemical Society, Division of Environmental Chemistry.
August 2002

Fellowship Recipient: Nihon Ikueikai Graduate Scholarship, Nihon Ikueikai.
1996 - 1997

E. Scholarly / Creative Professional Development Activities Attended:

Workshop, "Houston's Northeast Water Purificaiton Plant Expansion Helps Achieve Regional Groundwater Conversion Requirements," Texas American Water Works Association, Austin, TX, United States. (January 29, 2025 - Present).

Weekly Creative Work Support Group, "Write Watchers," Faculty Development, Texas State University. (April 3, 2020 - Present).

Facility Tour, "Ikehata Lab-TAWWA TXST - Lake Dunlap Water Treatment Plant Tour," Canyon Regional Water Authority, New Braunfels, TX, United States. (December 19, 2024).

Facility Tour, "Ikehata Lab - TAWWA-TXST - Samsung Austin Semiconductor Water & Wastewater Facility Tour," Samsung, Austin, TX, United States. (December 16, 2024).

Facility Tour, "CE 4323 - City of San Marcos Comanche Wells and Tank Facility Tour," City of San Marcos/Guadalupe-Blanco River Authority, San Marcos, TX, United States. (December 9, 2024).

Facility Tour, "Terminal Island Water Reclamation Plant Tour," City of Los Angeles Environment and Sanitation, San Pedro, CA, United States. (December 6, 2024).

Facility Tour, "Ikehata Lab - CE 3320/4323 - City of San Marcos Wastewater Treatment Plant Tour," City of San Marcos/Jacobs Solutions, San Marcos, TX, United States. (November 21, 2024).

Facility Tour, "TAWWA-TXST - City of San Marcos Surface Water Treatment Plant Tour," City of San Marcos/Guadalupe-Blanco River Authority, San Marcos, TX, United States. (October 15, 2024).

Facility Tour, "CE 4323 - City of San Marcos Surface Water Treatment Plant Tour," City of San Marcos/Guadalupe-Blanco River Authority, San Marcos, TX, United States. (October 9, 2024).

Facility Tour, "Aurora Water Peter D. Binney Water Treatment Plant Tour," City of Aurora, Aurora, CO, United States. (August 16, 2024).

Facility Tour, "Plum Creek Water Purification Facility Tour," Town of Castle Rock, Castle Rock, CO, United States. (August 16, 2024).

Facility Tour, "Ikehata Lab - On-site Blackwater Reuse Facility OSCAR and CLARA Tour," City of Austin, Austin, TX, United States. (August 7, 2024).

Conference Attendance, "Carbon Capture Technology Expo North America 2024," Trans Global, Houston, TX, United States. (June 26, 2024).

Facility Tour, "Ekeby Wastewater Treatment Plant Facility Tour," City of Eskilstuna, Eskilstuna, Sweden. (May 28, 2024).

Facility Tour, "TAWWA - Ullich Water Treatment Plant Facility Tour," City of Austin, Austin, TX, United States. (April 26, 2024).

Facility Tour, "CE 3320-TAWWA TXST - Western Canyon Water Treatment Plant Facility Tour," Guadalupe-Blanco River Authority, Canyon Lake, TX, United States. (April 5, 2024).

Facility Tour, "Lake Arrowhead Facility Tour," City of Wichita Falls, Wichita Falls, TX, United States. (February 16, 2024).

Conference Attendance, "2024 TAWWA Capital Area Chapter Annual Seminar," Texas AWWA, Austin, TX, United States. (February 9, 2024).

Facility Tour, "Plum Creek Utility Wastewater Treatment Plant Tour," Plum Creek Utility Company / BVRT Utility Holding Company, Uhland, TX, United States. (December 15, 2023).

Facility Tour, "Leonard Water Treatment Plant Tour," North Texas Municiapl Water District, Leonard, TX, United States. (November 17, 2023).

Facility Tour, "Wylie Water Treatment Plant Tour," North Texas Municiapl Water District, Wylie, TX, United States. (November 17, 2023).

Facility Tour, "Bachman Water Treatment Plant Tour," Dallas Water Utilties Department, Dallas, TX, United States. (November 9, 2023).

Facility Tour, "Groundwater Replenishment System Tour & Meeting," Orange County Water District, Fountain Valley, CA, United States. (October 12, 2023).

Conference Attendance, "ACS Fall 2023 Meeting," American Chemical Society, San Francisco, CA, United States. (August 11, 2023 - August 13, 2023).

Facility Tour, "Brackish Groundwater Treatment Facility Tour," Southmost Regional Water Authority, Bronwsville, TX, United States. (July 25, 2023).

Facility Tour, "H2Oaks Center Desalination Facility Tour," San Antonio Water System, Elmendorf, TX, United States. (July 7, 2023).

Facility Tour, "Groundwater Replenishment System Final Expansion Tour," Orange County Water District, Fountain Valley, CA, United States. (May 19, 2023).

Conference Attendance, "ACS Spring 2023 Meeting," American Chemical Society, Indianapolis, IN, United States. (March 24, 2023 - March 26, 2023).

Facility Tour, "Hays Caldwell Surface Water Treatment Plant Tour," Canyon Regional Water Authority, San Marcos, TX, United States. (March 16, 2023).

Facility Tour, "Lake Dunlap Water Treatment Plant Tour," Canyon Regional Water Authority, New Braunfels, TX, United States. (November 30, 2022).

Conference Attendance, "2022 Water Quality Technology Conference," American Water Works Association, Cincinnati, OH, United States. (November 12, 2022 - November 13, 2022).

Seminar, "Texas Innovation Series," Center for Innovation + Entrepreneurship, Texas State University, San Marcos, TX, United States. (October 11, 2022).

Workshop, "Pursuing Funding From Foundations," Faculty Development, Texas State University. (October 10, 2022).

Facility Tour, "Village of Cloudcroft Water Treatment Plant and Wastewater Treatment Plant Tour," Village of Cloudcroft, Cloudcroft, NM, United States. (September 20, 2022).

Workshop, "Overview of the Research Enhancement Program," Faculty Development, Texas State University. (September 14, 2022).

Conference Attendance, "Robert P. Hanzlik Retirement Symposium," Department of Medicinal Chemistry, University of Kansas, Lawrence, KS, United States. (September 10, 2022).

Facility Tour, "Hansen Water Treatment Plant Tour," Water District One, Kansas City, KS, United States. (September 9, 2022).

Facility Tour, "City of San Marcos Water Treatment Plant," City of San Marcos, San Marcos, TX, United States. (September 7, 2022).

Conference Attendance, "ACS Fall 2022 Meeting," American Chemical Society, Chicago, IL, United States. (August 20, 2022 - August 21, 2022).

Facility Tour, "Colored Water Treatment Facility Tour," Mesa Water, Costa Mesa, CA, United States. (July 29, 2022).

Conference Attendance, "ACE 22," American Water Works Association, San Antonio, TX, United States. (June 12, 2022 - June 15, 2022).

Facility Tour, "Brackish Groundwater National Desalination Research Facility (BGNDRF) Tour," US Bureau of Reclamation, Alamogordo, NM, United States. (June 3, 2022).

Facility Tour, "Kay Bailey Hutchison Desalination Plant Tour," El Paso Water, El Paso, TX, United States. (June 3, 2022).

Facility Tour, "Fred Hervey Water Reclamation Plant Tour," El Paso Water, El Paso, TX, United States. (June 2, 2022).

Facility Tour, "Water Treatment Plants #1 and #2 - Port Isabel Wastewater Treatment Plant Tour," Laguna Madre Water District, Port Isabel, TX, United States. (May 18, 2022).

Workshop, "Getting Social: Fundamental Social Media for Faculty," Faculty Development, Texas State University. (May 17, 2022).

Facility Tour, "Lake Dunlap Water Treatment Plant Facility Tour," Canyon Regional Water Authority, New Braunfels, TX, United States. (May 13, 2022).

Conference Attendance, "ACS Spring 2022 Meeting," American Chemical Society, San Diego, CA, United States. (March 19, 2022 - March 20, 2022).

Facility Tour, "Albert Robles Center for Water Recycling & Environmental Learning Tour," Water Replenishment District of Southern California, Pico Rivera, CA, United States. (March 18, 2022).

Conference Attendance, "TAWWA CAC 2022 Annual Seminar," Capital Area Chapter, Texas American Water Works Association. (February 15, 2022 - February 17, 2022).

Facility Tour, "City of San Marcos Wastewater Treatment Plant Tour," City of San Marcos, San Marcos, TX, United States. (February 10, 2022).

Facility Tour, "Hays Caldwell Surface Water Treatment Plant Tour," Canyon Regional Water Authority, San Marcos, TX, United States. (December 13, 2021).

Facility Tour, "City of Waco Water Treatment Plant Tour," City of Waco, Waco, TX, United States. (December 8, 2021).

Facility Tour, "City of Granbury Water Treatment Plant Tour," City of Granbury, Granbury, TX, United States. (November 13, 2021).

Facility Tour, "BRPUA Surface Water Treatment System Tour," Brazos Regional Public Utility Agency, Granbury, TX, United States. (November 12, 2021).

Workshop, "Documenting Invisible Labor and Contributions in Faculty Performance," Faculty Development, Texas State University, TX, United States. (November 9, 2021).

Facility Tour, "Plum Creek Utility Wastewater Treatment Plant Tour," Texas Aquastore, Uhland, TX, United States. (November 2, 2021).

Facility Tour, "Crossing Wastewater Treatment Plant Tour," Crystal Clear Special Utility District, New Braunfels, TX, United States. (October 21, 2021).

Workshop, "Re-envisioning Your Career Path and Professional Goals," Faculty Development, Texas State University, San Marcos, TX, United States. (September 24, 2021).

Conference Attendance, "4th Annual WIN Workshop," US Bureau of Reclamation. (September 21, 2021 - September 22, 2021).

Conference Attendance, "International Ozone Association World Congress," International Ozone Association. (August 30, 2021 - September 2, 2021).

Facility Tour, "City of San Marcos Water Treatment Plant Tour," City of San Marcos, San Marcos, TX, United States. (August 17, 2021).

Facility Tour, "SAWS H2Oaks Center Tour," San Antonio Water System (SAWS), Elmendrof, TX, United States. (July 26, 2021).

Facility Tour, "Hood Road Water Treatment Plant Tour," Seacoast Utility Authority, Palm Beach Gardens, FL, United States. (July 18, 2021).

Facility Tour, "Cypress Water Treatment Plant and Wichita Falls Resources Recovery Facility Tour," City of Wichita Falls, Wichita Falls, TX, United States. (July 12, 2021).

Facility Tour, "City of Kenedy Water Treatment Plant Tour," City of Kenedy, Kenedy, TX, United States. (July 9, 2021).

Facility Tour, "Plum Creek Utility Wastewater Treatment Plant Tour," Plum Creek Utility Company, Uhland, TX, United States. (June 29, 2021).

Facility Tour, "City of San Marcos Wastewater Treatment Plant Tour," City of San Marcos, San Marcos, TX, United States. (May 2021).

Facility Tour, "John F. Kubala and Pierce Burch Water Treatment Plant Tour," City of Arlington, Arlington, TX, United States. (May 24, 2021).

Workshop, "Grant Writing Program," Office of Research and Sponsored Programs, Texas State University. (February 28, 2020 - August 2020).

Workshop, "STEP Scholarship and Teaching Excellence Program," Faculty Development, Texas State University, San Marcos, TX, United States. (June 1, 2019 - August 31, 2020).

F. Media Recognition:

Annual Report, Jacobs Operations and Maintenance Services 2021-2022 Annual Report - San Marcos, TX. (January 2023).

Internet, Texas State Newsroom. (December 11, 2023).

Internet, 2023 APEX Award. (July 2023).

Internet, WateReuse Texas Review. (February 2023).

Magazine, Water Environment and Technology. (October 2024).

Magazine, Hillviews V. 55 No. 1. (May 2024).

Magazine, Water Environment and Technology. (March 2024).

Magazine, Ozone News in Japan. (March 2023).

Magazine, Monthly Core. (March 28, 2022).

Magazine, Monthly Core. (April 2020).

Magazine, Water Environment Technology. (September 2016).

Magazine, Water & Wastes Digest. (May 2015).

Newspaper, Community Impact - San Marcos - Buda - Kyle Edition. (May 2024).

Newspaper, Austin American-Statesman. (April 16, 2024).

Newspaper, San Antonio Express-News. (March 25, 2024).

Newspaper, University Star. (June 15, 2023).

IV. SERVICE

A. Institutional

1. University:

Participant, Bobcat Days. (October 7, 2023).

Participant, Trends in Scholarship Event, Alkek Library. (March 3, 2022).

Participant, STEP 1 "Strategies for Securing External Funding". (September 10, 2021).

Participant, New Tenure-Track Faculty Orientation. (August 18, 2021).

Participant, University Move-in. (August 15, 2021).

Participant, Bobcat Days. (February 22, 2020).

Participant, Bobcat Days. (October 19, 2019).

2. College:

Member, CoSE 60th Anniversary Planning Committee. (September 2025 - Present).

Chair, Graduate Scholarship Committee - MSEC. (August 2021 - Present).

Undergraduate Marshal, CoSE Fall 2022 Commencement. (August 5, 2023).

3. Department/School:

Member, MSEC Student Review Committee. (September 2025 - Present).

Undergraduate Advisor, Civil Engineering Career Advising. (August 2022 - Present).

Faculty Advisor, Water Works TXST (Texas American Water Works Association-Water Environment Association of Texas-Texas State Chapter). (May 2021 - Present).

Member, MS in Civil & Environmental Engineering Program Program Development Committee. (September 2024 - May 2025).

Member, Faculty Serach Committee - Transportation Engineering - Assistant Professor. (September 2024 - March 2025).

Member, Faculty Search Committee - Water Resources Assistant Professor. (September 2022 - March 2023).

Member, MSEC Candidacy Concerns Committee. (September 2020 - March 2023).

Member, MS Engineereing Admissions Committee. (October 2019 - August 2022).

Member, Faculty Search Committee - Water Resources Associate Professor. (October 2021 - April 2022).

Member, Faculty Search Committee. (September 2019 - March 2020).

B. Professional:

Chair, Research Committee, WateReuse Texas. (September 2024 - Present).

Editorial Review Board Member, Journal AWWA. (September 2024 - Present).

Vice President, International Ozone Association-Pan American Group. (September 2024 - Present).

Chair, Publications Committee, International Ozone Association, Sacramento, CA, United States. (December 2023 - Present).

Member, Board of Directors, International Ozone Association, Sacramento, CA, United States. (December 2023 - Present).

Member, Project Advisory Committee, Water Research Foundation, Project 5237 Ozone Nanobubbles (NBs) Technologies for Water Treatment. (July 2023 - Present).

Member, Project Advisory Committee, Water Research Foundation, Project 5256 Regionalized and Integrated Solutions for Brine Management and Recovery. (July 2023 - Present).

Member, M69, Inland Desalination and Concentrate Management, American Water Works Association. (June 2023 - Present).

Member, M88, Ozone Systems for Drinking Water, Wastewater, and Water Reuse, American Water Works Association. (January 2023 - Present).

Member, Standard Methods Committee, American Water Works Association. (January 2023 - Present).

Reviewer / Referee, Water Reuse. (January 2023 - Present).

Member, Research Committee, WateReuse Texas. (August 2022 - Present).

Editorial Review Board Member, Environmental Technology & Innovation. (May 2022 - Present).

Member, Annual Conference & Exposition Program Committee, American Water Works Association. (2022 - Present).

Member, Technical Program Committee, International Ozone Association-Pan American Group Annual Conference, Las Vegas, NV, United States. (January 2022 - Present).

Member, Water Quality Technology Conference Program Committee, American Water Works Association. (January 2022 - Present).

Member, Water Science and Research Division, Texas American Water Works Association. (January 2022 - Present).

Reviewer / Referee, AQUA Water Infrastructure, Ecosystems and Society. (2022 - Present).

Member, M12, Simplified Procedures for Water Examination, American Water Works Association. (November 2021 - Present).

Member, M68, Water Quality in Distribution Systems, American Water Works Association. (November 2021 - Present).

Member, Real-time Water Quality Monitoring Committee, American Water Works Association. (November 2021 - Present).

Member, Water Reuse Committee, Water Environment Association of Texas. (October 2021 - Present).

Division Liaison, Aesthetic Quality and Perception Committee, American Water Works Association. (June 2021 - Present).

Division Liaison, Membrane Processes and Research Committee, American Water Works Association. (June 2021 - Present).

Division Trustee, Water Quality and Technology Division, American Water Works Association. (June 2021 - Present).

Member, M57, Algae: Source To Treatment, American Water Works Association. (November 18, 2019 - Present).

Member, Subcommittes 1 and 3, ISO/TC 282 Water Reuse, International Organization for Standardization (ISO). (2019 - Present).

Editorial Review Board Member, Ozone: Science and Engineering. (2017 - Present).

Member, Board of Directors, International Ozone Association-Pan American Group, Sacramento, CA, United States. (January 2017 - Present).

Member, Committee on Environmental and Sustainability, American Chemical Society. (2017 - Present).

Member, Joint Section Research Committee, American Water Works Association. (2014 - Present).

Reviewer / Referee, Ozone: Science & Engineering. (March 2005 - Present).

Session Moderator, IOA-PAG 2022 Conference, International Ozone Association-Pan American Group, Las Vegas, NV, United States. (August 17, 2022).

Session Moderator, ACE 22, American Water Works Association, San Antonio, TX, United States. (June 15, 2022).

Reviewer / Referee, Emerging Contaminants in Wastewater: Treatment and Resource Recovery, Springer (Book Proposal). (February 2022).

Reviewer / Referee, Nordic Pulp & Paper Research Journal. (November 2021).

Reviewer / Referee, ACS ES&T Engineering. (August 2021 - October 2021).

Session Moderator, International Ozone Association World Congress. (September 2, 2021).

Member, Technical Program Committee, International Ozone Association World Congress. (January 2021 - August 2021).

Reviewer / Referee, Swiss National Science Foundation. (June 2021).

Reviewer / Referee, King Abdulla University of Science and Technology CR Grant. (May 2021 - June 2021).

Coordinator / Organizer, Research Webinar Series, American Water Works Association, Denver, CO, United States. (November 2019 - June 2021).

Chair, Joint Section Research Committee, American Water Works Association. (June 2018 - June 2021).

Moderator, Leading Research in the Field of Potable Reuse, Research Webinar, American Water Works Association. (April 14, 2021).

Reviewer / Referee, Swiss National Science Foundation. (2016 - 2020).

Member, Environmental Committee, Orange County Section, American Chemical Society. (2013 - 2020).

Reviewer / Referee, Ozone: Science and Engineering. (2007 - 2020).

Reviewer / Referee, Emerging Materials and Technology Book Series, CRC Press. (December 16, 2020).

Session Moderator, AWWA Virtual Summit, VS2-27 Cyanobacteria and Cyanotoxin Analytical Methods, American Water Works Association. (December 9, 2020).

Reviewer / Referee, Master's Programme in Environmental Engineering for Sustainable Development, Malardalen University, Sweden. (February 2020 - March 2020).

Chair, Orange County Section, American Chemical Society. (2019).

Chair, Research Committee, California-Nevada Section, American Water Works Association. (2017 - 2019).

Vice President, International Ozone Association-Pan American Group. (2017 - 2019).

Alternate Councilor, Orange County Section, American Chemical Society. (2016 - 2019).

Member, Executive Committee, Orange County Section, American Chemical Society. (2014 - 2019).

Member, Research Committee, California-Nevada Section, American Water Works Association. (2012 - 2019).

Reviewer / Referee, Environmental Science & Technology. (2008 - 2019).

Member, Technical Program Committee, International Ozone Association-Pan American Group. (2006 - 2019).

Reviewer / Referee, Building Bridges between Sustainability and Chemistry in Education and Outreach, ACS Books. (November 22, 2019).

Coordinator / Organizer, Fall 2019 National Meeting, Plastics in the Aquatic Environment Sympsium, American Chemical Society, San Diego, CA, United States. (April 2019 - August 2019).

Coordinator / Organizer, Fall 2019 National Meeting, American Chemical Society, San Diego, CA, United States. (March 2018 - August 2019).

Chair, Technical Program Committee, International Ozone Assication-Pan American Group Annual Conference, Las Vegas, NV, United States. (2018).

Chair-Elect, Orange County Section, American Chemical Society. (2017 - 2018).

Reviewer / Referee, Journal of Water and Environment Technology. (2017 - 2018).

Vice Chair, Joint Section Research Committee, American Water Works Association. (2017 - 2018).

Reviewer / Referee, Chemosphere. (2007 - 2018).

Co-Chair, Technical Program Committee, International Ozone Association World Congress, Washington, DC, United States. (2017).

Reviewer / Referee, 2017 IOA World Congress (Washington, DC). (2017).

Vice Chair, Research Committee, California-Nevada Section of the American Water Works Association. (2015 - 2017).

Member, Water Quality Subcommittee, Promotion of Ozone Technologies in Drinking Water Treatment in Japan, Japan Ozone Association. (2014 - 2017).

Co-Chair, Technical Program Committee, International Ozone Association-Pan American Group Annual Conference, Las Vegas, NV, United States. (2016).

Reviewer / Referee, Journal of Environmental Chemical Engineering. (2016).

Reviewer / Referee, IOA-PAG Annual Conferences. (2015 - 2016).

Reviewer / Referee, Journal of Environmental Management. (2008 - 2016).

Reviewer / Referee, Journal of Chemical Technology and Biotechnology. (2004 - 2016).

Co-Chair, Western Regional Meeting of the American Chemical Society, San Marcos, CA, United States. (2015).

Reviewer / Referee, National Research Foundation, Singapore, Singapore. (2015).

Reviewer / Referee, Sustainable Cities and Society. (2015).

Secretary, Research Committee, California-Nevada Section of the American Water Works Association. (2013 - 2015).

Member, Technical Review Committee, Water Environment Federation. (2011 - 2015).

Reviewer / Referee, Water Research. (2009 - 2015).

Reviewer / Referee, Journal of Environmental Engineering. (2008 - 2015).

Reviewer / Referee, Journal of Environmental Engineering and Science. (2006 - 2015).

Reviewer / Referee, Agricultrual Water Management. (2014).

Reviewer / Referee, Applied Water Science. (2014).

Reviewer / Referee, Arabian Journal of Chemistry. (2014).

Reviewer / Referee, Environment International. (2014).

Reviewer / Referee, Environmental Research. (2014).

Reviewer / Referee, IOA-PAG Annual Conferences. (2014).

Reviewer / Referee, IOA-IUVA Joint World Congress, Las Vegas, NV, United States. (2013).

Member, Technical Program Committee, 3rd Joint International Ozone Association and International Ultraviolet Association World Congress, Las Vegas, NV, United States. (September 22, 2013 - September 25, 2013).

Reviewer / Referee, Australian Antarctic Science Program, Australia. (2012).

Reviewer / Referee, Chemical Engineering Journal. (2012).

Reviewer / Referee, IOA-PAG Annual Conferences. (2012).

Reviewer / Referee, Journal of Advanced Oxidation Technologies. (2008 - 2012).

Reviewer / Referee, Environmental Toxicology and Chemistry. (2004 - 2012).

Reviewer / Referee, International Journal of Quantum Chemistry. (2003 - 2012).

Reviewer / Referee, Environmental Chemistry Letters. (2011).

Reviewer / Referee, Recent Patents on Engineering. (2011).

Reviewer / Referee, Science of the Total Environment. (2008 - 2011).

Co-Chair, Technical Program Committee, International Ozone Association-Pan American Group Annual Conference, Seattle, WA, United States. (2010).

Reviewer / Referee, 2010 IWA World Water Congress, Montreal, Quebec, Canada. (2010).

Reviewer / Referee, Environment and Water Industry Programme Office, PUB, Singapore. (2010).

Reviewer / Referee, Applied Catalysis B: Environmental. (2009 - 2010).

Member, Technical Review Committee, Water Environment Federation. (2006 - 2010).

Reviewer / Referee, Biotechnology and Bioengineering. (2001 - 2010).

Co-Organizer and Modulator, International Ozone Association World Congress - Emerging Contaminants Pre-Conference Workshop, Tokyo, Japan. (2009).

Reviewer / Referee, AIChE Journal. (2009).

Reviewer / Referee, Enzyme and Microbial Technology. (2007 - 2009).

Member, Technical Program Committee, International Ozone Association World Congress, Tokyo, Japan. (August 31, 2009 - September 3, 2009).

Co-Chair, Technical Program Committee, International Ozone Association-Pan American Group Annual Conference, Orlando, FL, United States. (2008).

Reviewer / Referee, CAB Reviews. (2008).

Reviewer / Referee, International Journal of Environmental Analytical Chemistry. (2008).

Reviewer / Referee, Bioresource Technology. (2004 - 2008).

Reviewer / Referee, Biotechnology Progress. (2007).

Reviewer / Referee, IOA-IUVA Joint World Congress, Los Angeles, CA, United States. (2007).

Vice Chair, International Ozone Association-International Ultraviolet Association Joint World Congress, Los Angeles, CA, United States. (2007).

Reviewer / Referee, Applied Engineering in Agriculture, (2006).

Reviewer / Referee, Canadian Journal of Microbiology. (2006).

Reviewer / Referee, Transactions of the ASABE. (2006).

Reviewer / Referee, Process Biochemistry. (2005).

C. Community:

Pro-bono Consultant, Virginia Department of Environmental Quality, Richmond, VA. (August 2024 - September 2024).

Interviewee, KXAN Austin, Austin, TX. (August 26, 2024).

Interviewee, KXAN Austin, Austin, TX. (June 20, 2024).

Volunteer, Doral Academy of Texas, San Marcos, TX. (February 26, 2024).

Volunteer, 2022 National Chemistry Week, Central Texas American Chemical Society, Austin, TX. (December 10, 2022).

Interviewee, KEYE CBS Austin, Austin, TX. (February 11, 2022).

Interviewee, Fox 7 Austin, Austin, TX. (February 8, 2022).

Interviewee, KVUE ABC, Austin, TX. (February 8, 2022).

Interviewee, KXAN Austin, Austin, TX. (February 8, 2022).

Interviewee, SA Smart Challenge, San Antonio, TX. (January 25, 2022).

D. Organization Memberships:

WateReuse Association (WateReuse). (August 2022 - Present).

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

American Membrane Technology Association (AMTA). (July 2020 - Present).

Texas American Water Works Association (TAWWA). (July 2019 - Present).

Water Environment Association of Texas (WEAT). (July 2019 - Present).

International Water Association. (2018 - Present).

Japanese Society of Phycology. (2017 - Present).

Japan Ozone Association. (2014 - Present).

American Water Works Association. (2006 - Present).

Water Environment Federation. (2006 - Present).

American Chemical Society. (1999 - Present).

Japanese Society of Environmental Toxicology. (1998 - Present).

Chemical Society of Japan. (1995 - Present).

Mycological Society of Japan. (2006 - 2020).

California Water Environment Association. (2009 - 2019).

E. Service Honors and Awards:

Award / Honor Recipient: Certification of Appreciation, Virginia Department of Environmental Quality - Commonwealth of Virginia.
September 2024

Award / Honor Recipient: Certificate of Appreciation, Japan Ozone Association.
November 2021
August 2014

Award / Honor Recipient: Service Recognition Award, Western Regional Meeting, American Chemical Society.
November 2015

Award / Honor Recipient: Service Recognition Award, International Ozone Association-Pan American Group.
September 2010
August 2008

Award / Honor Recipient: Service Recognition Award, International Ozone Association-International Ultraviolet Association.
August 2007

F. Service Grants and Contracts:

1. Funded External Service Grants and Contracts:

Ikehata, Keisuke. Local Section Sustainability Programming Grant, American Chemical Society, $500.00. (Funded: April 2019 - June 2019). Grant.

G. Service Professional Development Activities Attended:

Facility Tour, "City of San Marcos Surface Water Treatment Plant Tour," City of San Marcos / Guadalupe-Blanco River Authority, San Marcos, TX, United States. (November 16, 2023).

Facility Tour, "City of Seguin Water Treatment Plant Tour," City of Seguin, Seguin, TX, United States. (October 10, 2023).

Facility Tour, "Handcox Water Treatment Plant Tour," Austin Water, Austin, TX, United States. (May 9, 2023).

Workshop, "Documenting the Impact of COVID-19 on Faculty Performance," Faculty Development, Texas State University, San Marcos, TX, United States. (January 14, 2021).

Workshop, "American Chemical Society Leadership Institute," Dallas, TX, United States. (January 27, 2017 - January 29, 2017).

Workshop, "American Chemical Society Regional Meeting Planning Conference," Washington, DC, United States. (October 10, 2014 - October 12, 2014).