

Christina Keenan Remucal, Ph.D.

Professor | DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING

University of Wisconsin, Madison | [REDACTED] | [REDACTED]

EDUCATION

University of California, Berkeley	Ph.D. in Civil and Environmental Engineering Dissertation advisor: Prof. David L. Sedlak Dissertation title: Reactive oxidant generation by nanoparticulate zero-valent iron: Contaminant oxidation and toxicity Minors: Material Science and Engineering, Public Health	2009
University of California, Berkeley	M.S. in Civil and Environmental Engineering	2004
Massachusetts Institute of Technology	B.S. in Environmental Engineering Science Thesis advisor: Prof. Bettina M. Voelker Thesis title: The effect of additional hydrogen peroxide on solar water disinfection	2003
Cambridge University	Junior year in Department of Engineering Participant in the Cambridge-MIT Institute exchange program	2001-2002

APPOINTMENTS

ETH – SWISS FEDERAL INSTITUTE OF TECHNOLOGY Zürich, Switzerland		
Visiting Professor	Institute of Biogeochemistry and Pollutant Dynamics	2018-2019
EAWAG AQUATIC RESEARCH CENTER Dübendorf, Switzerland		
Visiting Professor	Department of Water Resources and Drinking Water	2018-2019
UNIVERSITY OF WISCONSIN, MADISON Madison, WI		
Interim Director	Aquatic Sciences Center	2023-present
Professor	Department of Civil and Environmental Engineering; Also affiliated with the Environmental Chemistry and Technology Program, Limnology and Marine Science Program, Molecular and Environmental Toxicology Center, and Department of Chemistry	2023-present
Associate Professor	Department of Civil and Environmental Engineering;	2018-2023
Director	Water Science and Engineering Laboratory	2018-present
Assistant Professor	Department of Civil and Environmental Engineering	2012-2018
ETH – SWISS FEDERAL INSTITUTE OF TECHNOLOGY Zürich, Switzerland		
Postdoctoral Associate	Institute of Biogeochemistry and Pollutant Dynamics	2009–2012
	<ul style="list-style-type: none"> Prof. Kristopher McNeill research group Research: Enhanced visible-light solar water disinfection with riboflavin and its derivatives; High-resolution mass spectrometry of natural organic matter 	

PROFESSIONAL EXPERIENCE

PARSONS | Walnut Creek, CA

Associate Environmental Engineer

2004-2005

LOS ALAMOS NATIONAL LABORATORY | Los Alamos, NM

Environmental Generalist | Dynamic Experimental Division

2002

HONORS AND AWARDS

Lakies Award for Great Lakes Research of the Year	2024
Balgooyen S. and Remucal C.K. (2023) Impacts of environmental and engineered processes on the PFAS fingerprint of fluorotelomer-based AFFF. <i>Environ. Sci. Technol.</i> 57, 1, 244-254. https://www.teachmeaboutthegreatlakes.com/92	
H.I. Romnes Faculty Fellowship	2023
Award includes \$60,000 in flexible research funds.	
ACS <i>ES&T Water</i> Best Paper Award	2022
Balgooyen S. and Remucal C.K. (2022) Tributary loading and sediment desorption as sources of PFAS to receiving waters. <i>ACS ES&T Water.</i> 2, 3, 436–445.	
Ragnar Onstad Service to Society Award	2022
ACS <i>ES&T Water</i> Best Paper Award	2021
Milstead R. and Remucal C.K. (2021) Molecular-level insights into the formation of traditional and novel halogenated disinfection byproducts. <i>ACS ES&T Water</i> 1, 8, 1966–1974.	
ESWRT HOT Article; Among top 10 percent of papers in 2020	2020
Trainer E.L., Ginder-Vogel M., and Remucal C.K. (2020) Organic structure and solid characteristics determine reactivity of phenolic compounds with synthetic and reclaimed manganese oxides <i>Environmental Science: Water Research & Technology.</i> 6, 540-553.	
Benjamin Smith Reynolds Award for Excellence in Teaching	2020
<i>ES&T</i> and <i>ES&T Letters</i> Young Investigator	2019
<i>Environmental Science: Processes & Impacts</i> Outstanding Reviewer	2019
ESPI HOT Article; Among top 10 percent of papers in 2018	2018
Balgooyen S., Campagnola G., Remucal C.K. , and Ginder-Vogel M. (2019) Impact of bisphenol A influent concentration and reaction time on MnO ₂ transformation in a stirred flow reactor. <i>Environ. Sci. Processes Impacts.</i> 21, 19-27.	
<i>Environmental Science and Technology Letters</i> Excellence in Review Award	2018
Royal Society of Chemistry collection – Celebrating excellence in research: 100 years of chemistry	2018
McConville, M., Cohen, N., Lantz, S., Nowicki, S., Hixson, J. Ward, A.S., Remucal C.K. (2017) A field analysis of lampricide photodegradation in Great Lakes tributaries. <i>Environ. Sci. Processes Impacts.</i> 19, 891 – 900.	
ESPI HOT Article; Among top 10 percent of papers in 2017	2017
McConville, M., Cohen, N., Lantz, S., Nowicki, S., Hixson, J. Ward, A.S., Remucal C.K. (2017) A field analysis of lampricide photodegradation in Great Lakes tributaries. <i>Environ. Sci. Processes Impacts.</i> 19, 891 – 900.	
<i>Environmental Science and Technology</i> Excellence in Review Award	2016
<i>Environmental Sciences: Processes and Impacts</i> Top 10 Reviewer Award	2016
University Honored Instructor	2016
NSF CAREER Award	2015
ESPI HOT Article; Among top 20 most downloaded articles in 2014	2014
Remucal C.K. , The role of indirect photochemical degradation in the environmental fate of pesticides: A review. 2014. <i>Environ. Sci. Process. Impacts.</i> 16 (4), 628 – 653.	
ETH Postdoctoral Fellowship	2010
Project: Enhancement of visible-light solar water disinfection with riboflavin and its derivatives	
U. C. Berkeley Outstanding Graduate Student Instructor Award	2008
American Chemical Society Division of Environmental Chemistry Graduate Student Paper Award	2008
Paper: Factors affecting the yield of oxidants from the reaction of nanoparticulate zero-valent iron and oxygen	
National Science Foundation Graduate Research Fellowship	2003

PUBLICATIONS

Peer-Reviewed Journal Articles

63. Bulson E., **Remucal C.K.**, and Hicks A. Opportunity provided by a mass balance approach to address per- and polyfluoroalkyl substances in metal recycling streams. Submitted to *J. Industrial Ecology* on September 10, 2024.
62. Cho S.W., **Remucal C.K.**, and Wei H. Common and distinctive Raman spectral features for the identification and differentiation of per- and polyfluoroalkyl substances. Submitted to *ACS ES&T Water* on September 7, 2024.
61. Pronschinske M., Corsi S., Elliott S., Shafer M., Hannon K., Gruber K., and **Remucal C.K.** Evaluating PFAS prevalence and potential for biological effects in Lake Superior tributaries. Revisions requested from *Environ. Toxicol. Chem.* on August 28, 2024.
60. Sherman-Bernetti S., Gruber K., and **Remucal C.K.** (2024) Preferential partitioning of per- and polyfluoroalkyl substances (PFAS) in freshwater ice. *Environ. Sci. Technol.* 58, 34, 15214–15223.
59. Sherman-Bernetti S., Kostelnik E., Gruber K., Balgooyen S., and **Remucal C.K.** (2024) Preferential partitioning of per- and polyfluoroalkyl substances (PFAS) and dissolved organic matter in freshwater surface microlayer and natural foam. *Environ. Sci. Technol.* 58, 29, 13099-13109.
58. Pomazal R., Malecki K., Stanton N., Shelton B., Lange M., Irving R., Meiman J., **Remucal C.K.**, Cochran A., and Schultz A. (2024) Determinants of per- and polyfluoroalkyl substances (PFAS) exposure among Wisconsin residents. *Environ. Health Perspectives* 254, 119131.
57. Swenson J., Ginder-Vogel M., and **Remucal C.K.** The influence of divalent cation inhibition and dissolved organic matter enhancement on phenol kinetics by manganese oxides. (2024) *Environ. Sci. Technol.* 58, 5, 2479–2489.
56. Van Frost S.R., White A., Jauquet J., Magness A., McMahon K.D., and **Remucal C.K.** (2024) Laboratory measurements underestimate the persistence of the aquatic herbicide fluridone in lakes. Submitted to *Environ. Sci. Processes Impacts* 26, 368 – 379.
55. Milstead R., Berg S.M., Kelly B., Knellwolf C., Larson C., Wammer K., and **Remucal C.K.** (2023) Limitations of conventional approaches to identify photochemically produced reactive intermediates involved in contaminant indirect photodegradation. *Environ. Sci. Processes Impacts* 25, 1694 – 1707.
54. White A., Van Frost S., Jauquet J., Magness A., McMahon K.D., and **Remucal C.K.** (2023) Quantifying the role of simultaneous transformation pathways in the fate of the novel aquatic herbicide floryprauxifen-benzyl. *Environ. Sci. Technol.* 57, 33, 12421–12430.
53. Milstead R.P., Horvath E., and **Remucal C.K.** (2023) Dissolved organic matter composition determines its susceptibility to complete and partial photooxidation within lakes. *Environ. Sci. Technol.* 57, 32, 11876–11885.
52. Bulman, D.M., Milstead R.P., and **Remucal C.K.** (2023) Formation of targeted and novel disinfection by-products during chlorine photolysis in the presence of bromide. *Environ. Sci. Technol.* 57, 47, 18877–18887. Invited paper for the special issue on “Oxidative Water Treatment: The Track Ahead.”
51. Bulson E., **Remucal C.K.**, and Hicks A. (2023) End-of-life circulation of PFAS in metal recycling streams: A sustainability-focused review. *Resources Cons. Recycling* 194, 106978.
50. Berg S., Wammer K., and **Remucal C.K.** (2023) Predicting dissolved organic matter photoreactivity by its molecular composition, optical properties, and redox activity. *Environ. Sci. Technol.* 57, 16, 6703–6711.
49. Balgooyen S. and **Remucal C.K.** (2023) Impacts of environmental and engineered processes on the PFAS fingerprint of fluorotelomer-based AFFF. *Environ. Sci. Technol.* 57, 1, 244-254.
48. Chin Y.-P., McKnight D.M., D'Andrilli J., Brooks N., Cawley K., Guerard J., Perdue E.M., Stedmon C.A., Tratnyek P., Westerhoff P., Wozniak A., Bloom P., Foreman C., Gabor R., Hamdi J., Hanson B., Hozalski R., Kellerman A., McKay G., Reckhow D., **Remucal C.K.**, Silverman V., Spencer R., Ward C., and Xin D. (2023) Identification of next generation International Humic Substances Society reference

- materials for advancing the understanding of the role of natural organic matter in the Anthropocene. *Aquat. Sci.* 85, 32, doi.org/10.1007/s00027-022-00923-x.
47. Trainer E., Ginder-Vogel M., and **Remucal C.K.** (2022) Enhancement and inhibition of oxidation rates in phenolic compound mixtures with manganese oxides. *ACS ES&T Water*, 2, 12, 2400-2408.
 46. Hixson J., Ward A., McConville M., and **Remucal C.K.** (2022) Release timing and duration control the fate of photolytic compounds in stream-hyporheic systems. *Water Resources Res.* DOI: 10.1029/2022WR032567.
 45. Vatankhah H., Tajdini B., Milstead R.P., Clevenger E., Murray C., Knappe D., **Remucal C.K.**, and Bellona C. (2022) Impact of ozone and biologically active filtration on the breakthrough of perfluoroalkyl acids during granular activated carbon treatment of municipal wastewater effluent. *Water Res.* 223, 118988.
 44. White A., Nault M., McMahon K.D., and **Remucal C.K.**, (2022) Synthesizing laboratory and field experiments to quantify dominant transformation mechanisms of 2,4-dichlorophenoxyacetic acid (2,4-D) in aquatic environments. *Environ. Sci. Technol.* 56, 15, 10838-40848.
 43. Gonzalez Vazquez, A., Hockenmeyer, K., McConville M., **Remucal C.K.**, and Koch P.L. (2022) Assessment of temperature and time following application as predictors of propiconazole translocation in *Agrostis stolonifera*. *ACS Ag. Sci. Technol.* 2, 3, 592-602.
 42. Balgooyen S. and **Remucal C.K.** (2022) Tributary loading and sediment desorption as sources of PFAS to receiving waters. *ACS ES&T Water*. 2, 3, 436–445.
Recipient of the 2022 *ACS ES&T Water* Best Paper award.
 41. Berg S., Peterson B., McMahon K.D., and **Remucal C.K.** (2022) Spatial and temporal variability of dissolved organic matter molecular composition in a stratified eutrophic lake. *J. Geophys. Res. B.* 127, 1, e2021JG006550.
 40. Berg S., Mooney R., McConville M., McIntyre P., and **Remucal C.K.** (2021) Seasonal and spatial variability of carbon concentration and composition in Lake Michigan tributaries. *J. Geophys. Res. B.* 126, 10, e2021JG006449.
 39. Harms T.K., Groffman P.M., Aluwihare L., Craft C., Wieder W.R., Hobbie S.E., Baer S.G., Blair J.M., Frey S., **Remucal C.K.**, Rudgers J.A., Collins S.L., and LTER OM Working Group. (2021) Patterns and trends of organic matter processing and transport: Insights from the US Long-Term Ecological Research network. *Climate Change Ecology* 2, 100025.
 38. Trainer E., Ginder-Vogel M., and **Remucal C.K.** (2021) Selective reactivity and oxidation of dissolved organic matter by manganese oxides. *Environ. Sci. Technol.* 55, 17, 12084–12094.
 37. Milstead R. and **Remucal C.K.** (2021) Molecular-level insights into the formation of traditional and novel halogenated disinfection byproducts. *ACS ES&T Water* 1, 8, 1966–1974.
Recipient of the 2021 *ACS ES&T Water* Best Paper award.
 36. Wu B., Berg S., **Remucal C.K.**, and Strathmann T. (2020) Evolution of N-containing compounds during hydrothermal liquefaction of sewage sludge. *ACS Sustainable Chem. Eng.* 8, 49, 18303–18313.
 35. Lin M.-H., Bulman D., **Remucal C.K.**, and Chaplin B. (2020) Chlorinated byproduct formation during the electrochemical advanced oxidation process at Magnéli phase Ti₄O₇ electrodes. *Environ. Sci. Technol.* 54, 19, 12673-12683.
 34. **Remucal C.K.**, Salhi E., Walpen N., and von Gunten U. (2020) Molecular-level transformation of dissolved organic matter during oxidation by ozone and hydroxyl radical. *Environ. Sci. Technol.* 54, 16, 10351-10360.
 33. Balgooyen S., **Remucal C.K.**, and Ginder-Vogel M. (2020) Identifying the mechanisms of cation inhibition of phenol oxidation by acid birnessite. *J. Environ. Qual.* doi.org/10.1002/jeq2.20144
 32. Bulman D. and **Remucal C.K.** (2020) The role of reactive halogen species in disinfection by-product formation during chlorine photolysis. *Environ. Sci. Technol.* 54, 15, 9629-9639.
 31. Hawkes J.A., D'Andrilli J., Sleighter R.L., Chen H., Hatcher P.G., Ijaz A., Khaksari M., Schum S., Mazzoleni L., Chu R., Tolic N., Kew W., Hess N., Lv J., Zhang S., He C., Shi Q., Hutchins R.H.S.,

Lozano D.C.P., Gavard R., Jones H.E., Thomas M.J., Barrow M.P., Osterholz H., Dittmar T., Simon C., Gleixner G., Berg S.M., **Remucal C.K.**, Catalán N., Cole R.B., Noriega-Ortega B., Singer G., Radoman N., Schmitt N.D., Stubbins A., Agar J.N., Zito P., and Podgorski D.C (2020). An international laboratory comparison of dissolved organic matter composition by high resolution mass spectrometry: Are we getting the same answer? *Limnol. Oceanogr. Methods*. 18, 6, 235-258.

Among the top 10 most downloaded papers in *Limnology and Oceanography: Methods*.

30. Trainer E.L., Ginder-Vogel M., and **Remucal C.K.** (2020) Organic structure and solid characteristics determine reactivity of phenolic compounds with synthetic and reclaimed manganese oxides *Environ. Sci. Water Res. Tech.* 6, 540-553.

Selected as one of the top 10% of papers published in *Environmental Science: Water Research & Technology*.

29. Lennox R., Bravener G., Lin H., Madenjian C., **Remucal C.K.**, Robinson K., Rous A., Siefkes M., Wilkie M., and Cooke S. (2019) Potential changes and challenges to the biology and management of invasive sea lamprey *Petromyzon marinus* in the Laurentian Great Lakes confronting climate change. *Global Change Bio.* 26, 3, 1118-1137.

28. Berg S., Whiting Q., Herli J., Winkels R., Wammer K., and **Remucal C.K.** (2019) The role of dissolved organic matter composition in determining photochemical reactivity at the molecular level. *Environ. Sci. Technol.*, 53, 20, 11725-11734.

27. **Remucal C.K.** (2019) Spatial and temporal variability of perfluoroalkyl substances in the Laurentian Great Lakes, *Environ. Sci. Processes Impacts*. 21, 1816 – 1834.

Included in the *Environmental Science: Processes & Impacts* Themed Issue on per- and polyfluoroalkyl substances (PFAS).

26. Ostrem-Loss E.M., Lee M., Wu M., Martien J., Chen W., Amador-Noguez D., Jefcoate C. **Remucal C.K.**, Jung S., Kim S., Yu J. (2019) Cytochrome P450 monooxygenase mediated metabolic utilization of benzo(a)pyrene by fungi. *mBio*, 10 (3), 10.1128/mBio.00558-19.

25. Bulman D., Mezyk S., and **Remucal C.K.** (2019) The impact of pH and irradiation wavelength on the production of reactive oxidants during chlorine photolysis. *Environ. Sci. Technol.* 53 (8), 4450 – 4459.

24. Balgooyen S., Campagnola G., **Remucal C.K.**, and Ginder-Vogel M. (2019) Impact of bisphenol A influent concentration and reaction time on MnO₂ transformation in a stirred flow reactor. *Environ. Sci. Processes Impacts*. 21, 19-27.

Selected as one of the top 10% of papers published in *Environmental Science: Processes & Impacts*.

23. Barazesh J.M., Prasse C., Wenk J., Berg S., **Remucal C.K.**, Sedlak D.L. (2018) Trace element removal in distributed drinking water treatment systems by cathodic H₂O₂ production and UV photolysis. *Environ. Sci. Technol.* 52, 195 – 204.

22. Golub M., Desai A.R., **Remucal C.K.**, McKinley G.A., Stanley E.H. (2017) Large uncertainty in estimating pCO₂ from carbonate equilibria in lakes. *J. Geophys. Res. B.* 122 (11), 2909 – 2924.

21. Maizel, A., Li, J., **Remucal C.K.** (2017) Relationships between dissolved organic matter composition and photochemistry in lakes of diverse trophic status. *Environ. Sci. Technol.* 51 (17), 9642 – 9632.
Included in the *ES&T* and *ES&T Letters* Virtual Issue on Early Career Scientists

20. Maizel, A., **Remucal C.K.** (2017) The effect of probe choice and solution conditions on the apparent photoreactivity of dissolved organic matter. *Environ. Sci. Processes Impacts*. 19, 1040 – 1050.
Included in the Natural Organic Matter Showcase Collection.

19. McConville, M., Mezyk, S.P., **Remucal C.K.** (2017) Indirect photodegradation of the lampricides TFM and niclosamide. *Environ. Sci. Processes Impacts*. 19, 1028 – 1039.

18. Maizel, A., **Remucal C.K.** (2017) The effect of advanced secondary municipal wastewater treatment on the molecular composition of dissolved organic matter. *Water Res.* 122, 42-52.

17. McConville, M., Cohen, N., Lantz, S., Nowicki, S., Hixson, J. Ward, A.S., **Remucal C.K.** (2017) A field analysis of lampricide photodegradation in Great Lakes tributaries. *Environ. Sci. Processes Impacts*. 19, 891 – 900.

Included in the Royal Society of Chemistry themed collection entitled “Celebrating excellence in research: 100 women of chemistry.”

16. Balgooyen, S.B., Alaimo, P.J., **Remucal C.K.**, Ginder-Vogel M. (2017) Mineralogical transformation of MnO₂ during the oxidation of bisphenol A. *Environ. Sci. Technol.* 51, 6053-6062.
15. Jane S.F., Winslow L.A., **Remucal C.K.**, Rose K.C. (2017) Long-term trends and synchrony in dissolved organic matter characteristics in Wisconsin, USA lakes. *J. Geophys. Res. B.* 122, 546-561.
14. Maizel A., **Remucal C.K.** (2017) Photochemical reactivity and molecular composition of size-fractionated dissolved organic matter. *Environ. Sci. Technol.* 51 (4), 2113-2123.
13. Li W., Jain T., Ishida K., **Remucal C.K.**, Liu H. (2016) A mechanistic understanding of the degradation of trace organic contaminants by UV/hydrogen peroxide, UV/persulfate and UV/free chlorine for water reuse. *Environ. Sci. Water Res. Tech.* 3, 128-138.
12. McConville M., Hubert T.D., **Remucal C.K.** (2016) Direct photolysis rates and transformation pathways of the lampricides TFM and niclosamide in simulated sunlight. *Environ. Sci. Technol.* 50, 9998-10006.
11. **Remucal C.K.**, Manley, D. (2016) The efficacy of chlorine photolysis as an advanced oxidation process for drinking water treatment. *Environ. Sci. Water Res. Technol.* 2, 565-579.
Invited for a special issue on *The Drinking Water Exposome* and featured on the issue's cover. Also included in the *Emerging Investigator Series*.
10. Chu C., Lundeen R.A., **Remucal C.K.**, Sander M., *McNeill K.* (2015) Enhanced indirect photochemical transformation of histidine and histamine through association with chromophoric dissolved organic matter. *Environ. Sci. Technol.* 49 (9), 5511–5519.
9. **Remucal C.K.**, Ginder-Vogel M. (2014) A critical review of the reactivity of manganese oxides with organic contaminants. *Environ. Sci. Processes Impacts.* 16 (6), 1247 – 1266.
Invited for the *Emerging Investigator* special issue.
8. **Remucal C.K.** (2014) The role of indirect photochemical degradation in the environmental fate of pesticides: A review. *Environ. Sci. Process. Impacts.* 16 (4), 628 – 653.
Invited for a special issue on *Environmental Photochemistry*.
7. **Remucal C.K.**, Cory R. M., Sander M. and McNeill K. (2012) Low molecular weight components in an aquatic humic substance as characterized by membrane dialysis and Orbitrap mass spectrometry. *Environ. Sci. Technol.* 46 (17), 9350-9359.
6. **Remucal C.K.** and McNeill K. (2011) Photosensitized amino acid degradation in the presence of riboflavin and its derivatives. *Environ. Sci. Technol.* 45 (12), 5230-5237.
5. **Keenan C.R.**, Goth-Goldstein R., Lucas D. and Sedlak D.L. (2009) Oxidative stress induced by zero-valent iron nanoparticles and Fe(II) in human bronchial epithelial cells. *Environ. Sci. Technol.* 43 (12), 4555-4560.
4. **Keenan C.R.** and Sedlak D.L. (2008b) Ligand-enhanced reactive oxidant generation by nanoparticulate zero-valent iron and oxygen. *Environ. Sci. Technol.*, 42 (18), 6936-6941.
3. Lee C., **Keenan C.R.** and Sedlak D. L. (2008) Polyoxometalate-enhanced oxidation of organic compounds by nanoparticulate zero-valent iron and ferrous iron. *Environ. Sci. Technol.*, 42 (13), 4921-4926.
2. **Keenan C.R.** and Sedlak D.L. (2008a) Factors affecting the yield of oxidants from the reaction of nanoparticulate zero-valent iron. *Environ. Sci. Technol.*, 42 (4), 1262-1267.
1. Fisher M.B., **Keenan C.R.**, Nelson K.L. and Voelker B.M. (2008) Speeding up solar disinfection (SODIS): Effects of hydrogen peroxide, temperature, pH, and copper plus ascorbate on the photoinactivation of *E. Coli*. *J. Water Health*, 6 (1), 35-51.

Invited Book Chapter

1. **Remucal C.K.** and Sedlak D.L. (2011) The role of iron coordination in the production of reactive oxidants from ferrous iron oxidation by oxygen and hydrogen peroxide. In P. Tratnyek, T. Grundl, S. Haderlein (Eds.), *Aquatic Redox Chemistry*. (Vol. 1071, pp. 177-197). Washington, DC: American Chemical Society.

Peer-Reviewed Conference Proceedings

2. Peters D., Darbeheshti M., Ma G., Vernaza K.M., Rihana-Abdallah A., **Remucal C.K.**, and Wettstein S. How students view the role of faculty advisors in the SWE organization, 2020 ASEE Annual Conference & Exposition, Montreal, Canada (virtual), June 22, 2020.
1. Darbeheshti M., Vernaza K.M., Wettstein S., Ma G., Peters D., Rihana-Abdallah A., and **Remucal C.K.** How faculty advisors and counselors view their role in the SWE organization, 2019 ASEE Annual Conference & Exposition, Tampa, FL, June 12, 2019.

Non-Peer Reviewed Reports

1. Foss D., Friis M., James A., Krallis S., Werner M., Warzecha C., Motl B., Kalberer J., Philpot K., Rydberg V., Dickert J., Johnson B., Pearson B., Trainer P., Kolar M., Cornelius T., Schmidt D., **Remucal C.K.**, Hughes M., Schauer J.J., Webb D. (2020) Wisconsin PFAS Action Plan. Report prepared at the request of Wisconsin Governor Evers as part of Executive Order No. 40.

Non-Peer Reviewed Preprints

2. White A., Gonzalez Vazquez A., McDaniel E., Peterson B., Koch P., **Remucal C.K.**, and McMahon K.D. Expanded diversity of *tfdA* harboring bacteria across the natural and built environment. *BioRxiv*. <https://doi.org/10.1101/2022.09.28.509959>
1. Hixson J., Ward A., McConville M., and **Remucal C.K.** (2021) Release timing and duration control the fate of photolytic compounds in stream-hyporheic systems. *EarthArXiv*. <https://doi.org/10.31223/X5189W>

Non-Peer Reviewed Press

124. Provost M. "New research center combats 'forever chemicals.'" *On Wisconsin Magazine*. Fall 2024. <https://onwisconsin.uwalumni.com/new-research-center-combats-forever-chemicals/>
123. Hellpap A. "'Forever chemicals' show up in Wisconsin residents." *UW-Madison School of Medicine and Public Health News*. August 28, 2024. <https://www.med.wisc.edu/news/pfas-found-in-wisconsin-residents/>
122. Rogers A.L. "Although PFAS in Dane County lakes are a concern, you can still enjoy the waters." *Wisconsin Public Radio*. August 22, 2024. <https://www.wpr.org/news/pfas-dane-county-lakes-activities>
121. Schulte L. "Foam on Wisconsin lakes may contain PFAS, UW study finds." *Milwaukee Journal Sentinel*. July 25, 2024. <https://www.jsonline.com/story/news/local/wisconsin/2024/07/25/foam-on-wisconsin-lakes-may-contain-pfas-uw-study-finds/74336661007>
120. **Remucal C.K.** "Congratulations to GRC Environmental Sciences: Water poster winners." *Association of Environmental Engineering and Science Professors Newsletter*. July 2024.
119. Thoresen K. "Study: Foam on lakes and rivers in Wisconsin has PFAS concentration up to 7,000 times higher than surface water." *WXPR Rhinelander*. July 18, 2024. <https://www.wxpr.org/energy-environment/2024-07-18/study-foam-on-lakes-and-rivers-in-wisconsin-has-pfas-concentrations-up-to-7-000-times-higher-than-surface-water>
118. Zuikov M. "Lake and river foams study reveals high PFAS levels." *Wisconsin Water News Podcast*. July 15, 2024. <https://www.seagrant.wisc.edu/audio/wisconsin-water-news/lake-and-river-foams-study-reveals-high-pfas-levels/>
117. Freyberg F. "Christy Remucal on finding PFAS contamination in water foams." *PBS Wisconsin – Here & Now*. Interview aired on July 12, 2024. <https://pbswisconsin.org/news-item/christy-remucal-on-finding-pfas-contamination-in-water-foams/>
116. Yahr N. "Lake Monona's foam has highest PFAS levels in Wisconsin, study finds." *The Cap Times*. July 12, 2024. https://captimes.com/news/business/lake-monona-s-foam-has-highest-pfas-levels-in-wisconsin-study-finds/article_1b297426-3fc3-11ef-9d70-f705edd77505.html
115. Redman H. "Study finds high levels of PFAS in foam on Wisconsin waterways." *Wisconsin Examiner*. July 10, 2024. <https://wisconsinexaminer.com/briefs/study-finds-high-levels-of-pfas-in-foam-on-wisconsin-waterways/>

114. Ahrens D. "Lake Monona's shore foam has highest PFAS levels in the state, study finds." *WORT 89.9FM*. July 10, 2024. <https://www.wortfm.org/l-mononas-shore-foam-has-highest-pfas-levels-in-the-state/>
113. Kaeding D. "Study finds foam on Wisconsin rivers and lakes has higher PFAS levels than waters below." *Wisconsin Public Radio*. July 10, 2024. <https://www.wpr.org/news/uw-study-foam-wisconsin-rivers-lakes-has-higher-pfas-levels>
112. Rahman A. "UW-Madison researchers find high PFAS levels in natural foam on Wisconsin lakes, rivers." *News 3 Now WISC-TV*. July 9, 2024. https://www.channel3000.com/news/uw-madison-researchers-find-high-pfas-levels-in-natural-foam-on-wisconsin-lakes-rivers/article_492350be-3e73-11ef-a128-073c65287ab2.html
111. Harrington M. "Lake and river foams study reveals high PFAS levels, even though underlying water may be less contaminated." *University of Wisconsin News*. July 9, 2024. <https://news.wisc.edu/lake-and-river-foams-study-reveals-high-pfas-levels-even-though-underlying-water-may-be-less-contaminated/>
110. Harrington M. "Lake and river foams study reveals high PFAS levels, even though underlying water may be less contaminated." *Wisconsin Sea Grant News*. July 9, 2024. <https://www.seagrant.wisc.edu/news/lake-and-river-foams-study-reveals-high-pfas-levels-even-though-underlying-water-may-be-less-contaminated/>
109. Holloway A. "Finding PFAS: New Center of Excellence will amplify ability to detect and identify 'forever chemicals.'" *UW-Madison College of Engineering News*. June 5, 2024. <https://engineering.wisc.edu/news/finding-pfas-new-center-of-excellence-will-amplify-ability-to-detect-and-identify-forever-chemicals/>
108. Balter M. "Algae and Hydrilla are back in our reservoirs, and so are the chemicals used to treat them. Are they bad for the fish?" *Croton Chronicle*. May 28, 2024. https://thecrotonchronicle.substack.com/p/algae-and-hydrilla-are-back-in-our?utm_campaign=email-post&r=nx4h&utm_source=substack&utm_medium=email
107. Kjeldsen V. "New PFAS restrictions for drinking water." *Channel 15 news*. April 10, 2024. <https://www.wmtv15news.com/>
106. Melon A. "UW receives federal funding to open PFAS center." *Badger Herald*. April 1, 2024. <https://badgerherald.com/news/campus/2024/04/01/uw-receives-federal-funding-to-open-pfas-center/>
105. D'Andrea R. "UW-Madison to open PFAS center with federal funds." *Wisconsin Public Radio*. April 1, 2024. <https://www.wpr.org/news/uw-madison-to-open-pfas-center-with-federal-funds>
104. Harrington M. "New federal funding will boost holistic PFAS research." *Wisconsin Sea Grant News*. March 28, 2024. <https://www.seagrant.wisc.edu/news/new-federal-funding-will-boost-holistic-pfas-research/>
103. Holloway A. "Upper Midwest water samples key in future industrial chemical breakdown." *College of Engineering News*. March 18, 2024. <https://engineering.wisc.edu/news/upper-midwest-water-samples-key-in-future-industrial-chemical-breakdown/>
102. Zuikov M. "Wisconsin Sea Grant garners good showing in the Lakie Awards." *Wisconsin Sea Grant News*. February 22, 2024. <https://www.seagrant.wisc.edu/blog/wisconsin-sea-grant-garners-good-showing-in-the-lakie-awards/>
101. Harrington M. "Remucal named interim director of Sea Grant." *Wisconsin Sea Grant News*. October 23, 2023. <https://www.seagrant.wisc.edu/news/remucal-named-interim-director-of-sea-grant/>
100. Harrington M. "Remucal named interim director of WRI" *Wisconsin Water Resources Institute*. October 23, 2023. <https://www.wri.wisc.edu/news/remucal-named-interim-director-of-wri/>
99. Snyder S., Drewes J., Huang C.-H., Mills M., Yang M., and Zhang H.J. "Announcing the winners of the inaugural 2022 ACS ES&T Water Best Paper Award." *ACS ES&T Water* 2023, 3, 12, 3728–3729.

98. Amenabar T. "How do you know if your drinking water is safe from forever chemicals?" *Washington Post*. June 26, 2023. <https://www.washingtonpost.com/wellness/2023/06/24/pfas-water-forever-chemicals/>
97. Kassulke N. "Faculty receive 2023-24 WARF Named Professorships, Kellett Fellowships, and Romnes Awards." *UW News*. June 13, 2023. <https://news.wisc.edu/faculty-receive-2023-24-warf-named-professorships-kellett-fellowships-and-romnes-awards>
96. Ferrett R. "Following PFAS from toilet paper to the Great Lakes." *Wisconsin Public Radio*. April 3, 2023. <https://www.wpr.org/following-pfas-toilet-paper-great-lakes>
95. Matysiak S. "City of Madison to comply with first ever national PFAS regulations on drinking water." *Badger Herald*. March 22, 2023. <https://badgerherald.com/news/2023/03/22/city-of-madison-to-comply-with-first-ever-national-pfas-regulations-on-drinking-water/>
94. Cushman W. "From concussions to PFAS: Five ways UW research is tackling real-world problems." *University of Wisconsin News*. March 7, 2023. <https://news.wisc.edu/from-concussions-to-pfas-five-ways-uw-research-is-tackling-real-world-problems/>
93. Goldstein B. "Great Lakes pollution threatens Ojibwe treaty rights to fish." *Wisconsin Watch*. February 24, 2023. <https://wisconsinwatch.org/2023/02/great-lakes-pollution-ojibwe-treaty-rights-to-fish/>
92. Bereny A. "Senate committee holds first-ever hearing on PFAS contamination in Wisconsin" *The Daily Cardinal*. February 3, 2023. <https://www.dailycardinal.com/article/2023/02/senate-committee-holds-first-ever-hearing-on-pfas-contamination-in-wisconsin>
91. Spears B. "Lawmakers looking to address PFAS pollution" *Wisconsin Examiner*. February 1, 2023. <https://wisconsinexaminer.com/2023/02/01/lawmakers-looking-to-address-pfas-pollution/>
90. Meyer B. "Wisconsin lawmakers hope for bipartisan support of PFAS research in 2023" *Fox 11 News*. Television story aired January 31, 2023. <https://fox11online.com/news/state/wisconsin-lawmaker-senator-diane-hesselbein-pfas-pollution-seems-insurmountable-forever-chemicals-marquette-madison-green-bay-contamination-environment-health>
89. Schmidt M. "Good chance" for bipartisan fix to PFAS problem, GOP natural resources chair says" *Wisconsin State Journal*. January 31, 2023. https://madison.com/news/local/govt-and-politics/good-chance-for-bipartisan-fix-to-pfas-problem-gop-chair-says/article_7427302b-999b-5572-a673-b4cb977846b5.html
88. Richmond T. "Wisconsin GOP signals possible movement on PFAS pollution" *Associated Press*. January 31, 2023. <https://apnews.com/article/wisconsin-state-government-madison-climate-and-environment-pollution-6e4899bdc5e4e83bd2f7afe262943ca1>
The AP story was covered by multiple media outlets including PBS Wisconsin, Fox6 Milwaukee, Chron, WTMJ, Green Bay Press Gazette, CBS Minnesota, and Spectrum News.
87. Fannon E. "It takes a while to educate people': GOP chair determined to tackle PFAS contamination" *CBS 15 – WDJT – Milwaukee*. Television story aired January 31, 2023. <https://www.cbs58.com/news/it-takes-a-while-to-educate-people-gop-chair-determined-to-tackle-pfas-contamination>
86. Schulte L. "Key GOP lawmaker pledges action on toxic 'forever chemicals'" *Milwaukee Journal Sentinel*. January 31, 2023. <https://www.jsonline.com/story/politics/wisconsin-republican-pledges-action-on-pfas-water-contamination>
85. Noha E. "PFAS contamination study shows Little River has highest concentrations." *Marquette Menominee EagleHerald*. January 22, 2023. https://www.ehextra.com/news/pfas-contamination-study-shows-little-river-has-highest-concentrations/article_5687609a-9845-11ed-88b7-03c46f84b253.html
84. Barrileaux A. "Crisis of contamination: Toxic PFAS in our Great Lakes." *Clean Wisconsin*. Podcast aired on January 23, 2023. <https://www.cleanwisconsin.org/crisis-of-contamination-toxic-pfas-in-our-great-lakes/>
83. Hawthorne M. "Freshwater fish are significant more contaminated with toxic forever chemicals than saltwater fish and shellfish, analysis shows." *Chicago Tribune*. January 17, 2023.

<https://www.chicagotribune.com/news/environment/ct-toxic-forever-chemicals-fish-20230117-5fygn4fikndmti33g3vmhy6raa-story.html>

82. Holloway A. "Shining light on the sun's role in lake carbon cycling." *UW-Madison College of Engineering News*. November 30, 2022. <https://engineering.wisc.edu/news/shining-light-on-the-suns-role-in-lake-carbon-cycling/>
81. Zimmerman J. "Plume of toxic chemicals in Green Bay traced to Tyco Fire Products by researchers." *WBAY*. Story aired January 9, 2023. <https://www.wbay.com/2023/01/10/plume-toxic-chemicals-green-bay-traced-tyco-fire-products-by-researchers/>
80. Stenger L. "Scientists confirm PFAS has made its way to Green Bay: What could that mean for citizens?" *NBC26 News*. Story aired January 9, 2023. <https://www.nbc26.com/greenbay/scientists-confirm-pfas-has-made-its-way-to-green-bay>
79. Noha E. "New study confirms PFAS contamination in bay of Green Bay." *Marinette Menominee EagleHerald*. January 9, 2023. https://www.ehextra.com/news/new-study-confirms-pfas-contamination-in-bay-of-green-bay/article_37d993e0-8f01-11ed-90e3-eb95ab2b1479.html
78. Ebsch M. Interview with *Bay Cities Radio* aired on January 8, 2023.
77. Andersen L. "Scientists concerned by toxic PFAS spread to Green Bay's waters." *Fox 11 News*. Story aired January 4, 2023. <https://fox11online.com/news/local/scientists-concerned-toxic-pfas-spread-green-bay-waters-lake-michigan-forever-chemicals-university-of-wisconsin-madison-marinette-peshtigo-tyco-dnr-groundwater-treatment>
76. Kaeding D. "Study links PFAS in Green Bay to Marinette manufacturer of firefighting foam." *Wisconsin Public Radio*. Full story aired January 4, 2023. <https://www.wpr.org/study-pfas-green-bay-marinette-manufacturer-firefighting-foam-tyco-johnson-controls>
75. Bennett P. "Scientists warn of toxic PFAS plume in groundwater of Lake Michigan's Green Bay." *EcoWatch*. January 4, 2023. <https://www.ecowatch.com/green-bay-lake-michigan-forever-chemicals-pfas.html>
74. Holmes I. "PFAS plume found in Green Bay, Lake Michigan waters." *Wisconsin Examiner*. January 4, 2023. <https://wisconsinexaminer.com/brief/pfas-plume-found-in-green-bay-lake-michigan-waters/>
73. Ellison G. "Researchers link PFAS in Lake Michigan to Wisconsin manufacturer." *MLive*. January 4, 2023. <https://www.mlive.com/public-interest/2023/01/researchers-link-pfas-in-lake-michigan-to-wisconsin-manufacturer.html>
72. Flesher J. "Study: Toxic PFAS chemical plume detected in Green Bay" *Associated Press*. January 3, 2023. <https://apnews.com/article/green-bay-michigan-wisconsin-lake-marinette-428b54cab038e6d41da77b3981fa3170>
The AP story was covered by >50 media outlets including *Washington Post*, *ABC News*, *Fox News*, *Fortune*, *US News & World Report*, and the *Wisconsin State Journal*.
71. Schulte L. "'Forever chemicals' from Marinette firefighting foam plant are in Lake Michigan, UW researchers find." *Milwaukee Journal Sentinel*. January 3, 2023. <https://www.jsonline.com/story/news/breaking/2023/01/03/pfas-from-marinette-firefighting-foam-plant-found-in-lake-michigan/69773831007/>
70. Harrington M. "Northeastern Wisconsin PFAS plume moves into Green Bay via groundwater." *Wisconsin Sea Grant*. January 3, 2023. <https://www.seagrants.wisc.edu/news/new-study-northeastern-wisconsin-pfas-plume-moves-into-green-bay-via-groundwater/>
The Sea Grant story was also posted on [UW-Madison News](#) and [College of Engineering News](#).
69. Hubbuch C. "Experts leery, DNR mum as Dane County claims success with experimental PFAS treatment." *Wisconsin State Journal*. October 5, 2022. https://madison.com/news/local/govt-and-politics/experts-leery-dnr-mum-as-dane-county-claims-success-with-experimental-pfas-treatment/article_79c06230-a03d-55cb-83cc-aad88056b1ca.html

68. Snyder S., Drewes J., Huang C.-H., Mills M., and Yang M. "Announcing the winners of the inaugural 2021 ACS ES&T Water Best Paper Award." *ACS ES&T Water* 2022, 2, 12, 2255–2257.
67. Mahon E. "Understanding freshwater foam may help in fight against PFAS "forever chemicals"" UW News Video. Posted on October 18, 2022. <https://www.youtube.com/watch?v=ul0c8RjM4sQ&feature=youtu.be>
66. Mahon E. "Understanding freshwater foam may help in fight against PFAS "forever chemicals"" UW News. Posted on October 18, 2022. <https://news.wisc.edu/understanding-freshwater-foam-may-help-in-fight-against-pfas-forever-chemicals/>
66. Moore A. Live interview on the Friday 9 O'Clock Buzz on WORT 89.9 on PFAS in foam research project. July 8, 2022.
65. Wegehaupt N. "EPA sets PFAS health advisories at levels well below current standard." *WORT 89.9 News*. June 16, 2022. <https://www.wortfm.org/epa-sets-pfas-health-advisories-at-levels-well-below-current-standard/>
64. Kind S. "Pass the PFAS: Wisconsin communities grapple with 'forever chemicals' as state, federal officials stall regulation standards." *Badger Herald*. May 4, 2022. <https://badgerherald.com/features/2022/05/04/pass-the-pfas-wisconsin-communities-grapple-with-forever-chemicals-as-state-federal-officials-stall-regulation-standards/>
63. Benish S. "We want to make sure our work is having an impact': UW-Madison Day celebrates university's research." *Channel 3000*. Aired April 27, 2022. <https://www.channel3000.com/we-want-to-make-sure-our-work-is-having-an-impact-uw-madison-day-celebrates-university-research/>
62. Schulte L. "UW study finds Wisconsin rivers contributing to 'forever chemical' concentrations in bay of Green Bay, Lake Michigan." *Milwaukee Journal Sentinel*. February 18, 2022. <https://www.jsonline.com/story/news/local/wisconsin/2022/02/18/uw-study-finds-rivers-emptying-forever-chemicals-in-lake-michigan/6788183001/>
61. Udasin S. "Tributaries play key role in feeding 'forever chemicals' into Great Lakes: study." *The Hill*. February 15, 2022. <https://thehill.com/policy/equilibrium-sustainability/594265-tributaries-play-key-role-in-feeding-forever-chemicals-into>
60. Harrington M. " ." *UW News*. February 14, 2022. <https://news.wisc.edu/study-finds-tributaries-play-significant-role-in-great-lakes-pfas-loading/>
59. Riley S. "Lake Superior's forever chemicals." *Washington Post Magazine*. January 12, 2022. <https://www.washingtonpost.com/magazine/2022/01/12/lake-superior-forever-chemicals/>
58. Wojcik M. "Eau Claire takes action on a PFAS problem in its well water." *PBS Wisconsin*. Aired in the Here & Now program on November 12, 2021. <https://pbswisconsin.org/news-item/eau-claire-takes-action-on-a-pfas-problem-in-its-well-water/>
57. Watson S. "EPA proposal could put PFAS on contaminant list, UW experts support decision." *Badger Herald*. October 7, 2021. <https://badgerherald.com/news/2021/10/07/epa-proposes-pfas-on-contaminant-list-uw-experts-support-decision/>
56. Couch R. "Wednesday Nite @ the Lab: PFAS in waters of Wisconsin." *Badger Herald*. September 23, 2021. <https://badgerherald.com/news/2021/09/23/wednesday-nite-the-lab-pfas-in-waters-of-wisconsin/>
55. Holloway A. "Following herbicides into – and ideally out of – Wisconsin's lakes." *University of Wisconsin-Madison College of Engineering News*. September 22, 2021. https://www.engr.wisc.edu/news/following-herbicides-into-and-ideally-out-of-wisconsin-lakes/?utm_campaign=coe_mkt&utm_medium=social&utm_source=twitter&utm_content=cee
54. Remucal C. "Faculty flash talk: PFAS in Wisconsin" Video shared with >38,000 College of Engineering Alumni on July 21, 2021. <https://youtu.be/bZiyYTrp5co>
53. Bence S. "PFAS chemicals pose a continued threat to water in northeast Wisconsin." *Milwaukee Public Radio. Lake Effect Program*. April 19, 2021. <https://www.wuwm.com/2021-04-19/pfas-chemicals-pose-a-continued-threat-to-water-in-northeast-wisconsin>

52. Karnopp H. "‘Allow us to do the work’: DNR wants budget to include funding for PFAS testing." *Daily Cardinal*. April 15, 2021. https://www.dailycardinal.com/article/2021/04/allow-us-to-do-the-work-dnr-wants-budget-to-include-funding-for-pfas-testing?ct=content_open&cv=cbox_featured
51. Ness E. "The big wax off: The science & impact of fluoro wax." *Silent Sports Magazine*. January 2021. p. 22-23. Print.
50. Peeples L. "Life-saving drinking water disinfectants have a dark side." *Enzia*. January 15, 2021. <https://ensia.com/features/drinking-water-disinfection-byproducts-pathogens/>
49. Zhuikov M. "The fate of PFAS in Green Bay." *Wisconsin Sea Grant Water News Podcast*. January 8, 2021. <https://www.seagrant.wisc.edu/audio/wisconsin-water-news/>
48. Zhuikov M. "Investigating the fate of PFAS in Green Bay and Lake Michigan." *University of Wisconsin Sea Grant Institute Press Release*. December 16, 2020. <https://www.seagrant.wisc.edu/news/investigating-the-fate-of-pfas-in-green-bay-and-lake-michigan/>
47. Peterson E. "Fox River Cleanup Project celebrated at annual Clean Bay Backers meeting." *Fox 11 News*. September 29, 2020. <https://fox11online.com/news/local/fox-river-cleanup-project-celebrated-at-annual-clean-bay-backers-meeting>
46. Dahdah J. "Public asked to weigh in on Wisconsin PFAS Action Plan." *Spectrum News 1*. Aired October 22, 2020. <https://spectrumnews1.com/wi/milwaukee/news/2020/10/22/public-asked-to-weigh-in-on-wisconsin-pfas-action-plan>
45. Balgooyen S., **Remucal C.K.**, Erickson D., and Ramage H. "Analysis of PFAS release following the April 2018 refinery fire in Superior, Wisconsin." *Lake Superior National Estuarine Research Reserve Press Release*. September 1, 2020. <https://lakesuperiorreserve.org/resources/analysis-of-pfas-release-following-the-april-2018-refinery-fire-in-superior-wisconsin/>
44. Holloway A. "Tracing lampricides through Great Lakes tributaries." *UW-Madison College of Engineering News*. March 26, 2020. <https://www.engr.wisc.edu/news/tracing-lampricides-through-great-lakes-tributaries/>
43. Dahdah J. "Researchers use Marinette contamination to learn more about PFAS." *Spectrum News 1*. Aired March 10, 2020. <https://spectrumnews1.com/wi/madison/news/2020/03/10/researchers-use-marinette-contamination-to-learn-more-about-pfas-contamination#>
42. Jones S. "PFAS in Wisconsin." *WSUM 91.7 EarthSpeak Radio*. Live interview on February 24, 2020.
41. College of Engineering "College honors eight outstanding faculty and staff." *UW-Madison College of Engineering News*. February 18, 2020. <https://www.engr.wisc.edu/news/college-honors-eight-outstanding-faculty-and-staff/>
40. Kothari A. "New legislation to restrict use of PFAS, funding for research testing." *Badger Herald*. February 11, 2020. <https://badgerherald.com/news/2020/02/11/new-legislation-to-restrict-use-of-pfas-funding-for-research-testing/>
39. Willison B. "What are PFAS and how do they move in the environment?" Video by *Wisconsin Sea Grant*. Posted on February 4, 2020. <https://www.youtube.com/watch?v=oRoGq-JQ0S0>
38. Gretzinger E. "UW, Madison Water Utility work to address tensions from PFAS." *Badger Herald*. February 4, 2020. <https://badgerherald.com/news/2020/02/04/uw-madison-water-utility-work-to-address-tensions-from-pfas/>
37. Vasquez R. "PFAS 'forever chemicals' explained" *Wisconsin Public Radio: Central Time*. Interview aired January 22, 2020. <https://www.wpr.org/pfas-forever-chemicals-explained>
36. Sperling H. "In the field with forever chemicals" *WisContext Newsletter*. January 17, 2020.
35. **Remucal C.K.** "What are PFAS and why are they a problem?." *WisContext*. January 14, 2020. <https://www.wiscontext.org/what-are-pfas-and-why-are-they-problem>
34. Bergquist L. "Pollution cases involving 'forever' chemicals are growing across Wisconsin." *Milwaukee Journal Sentinel*. December 19, 2019. <https://www.jsonline.com/story/news/2019/12/30/discoveries-forever-chemicals-growing-across-wisconsin/2742023001/>

33. Dahdah J. "Madison switches to PFAS-free firefighting foam." *Spectrum News 1*. Aired December 17, 2019. <https://spectrumnews1.com/wi/madison/news/2019/12/17/madison-switches-to-pfas-free-firefighting-foam>
32. Soman S. "Dr. Christy Remucal on PFAS Chemicals." WORT 89.9 News. Aired December 4, 2019. <https://www.wortfm.org/dr-christy-remucal-on-pfas-chemicals/>
31. "Madison Water Utility: UW-Madison researcher launches new PFAS study in Wisconsin." *University of Wisconsin College of Engineering News*. December 3, 2019. <https://www.engr.wisc.edu/madison-water-utility-uw-madison-researcher-launches-new-pfas-study-wisconsin/>
30. Barrilleaux A. "'We'll be doing this forever.' Understanding the impact of PFAS." *City of Madison – Madison Water Utility*. December 3, 2019. <https://www.cityofmadison.com/water/insidemwu/well-be-doing-this-forever-understanding-the-impact-of-pfas>
29. Zhuikov M. "Tea and sunlight." *Wisconsin Sea Grant Water News Podcast*. November 19, 2019. <https://www.seagrant.wisc.edu/audio/wisconsin-water-news/>
28. Zhuikov M. "Tea and sunlight: Exploring how nature breaks down pollution in the St. Louis River." *Wisconsin Sea Grant Blog*. November 14, 2019. <https://www.seagrant.wisc.edu/news/new-keillor-fellow-to-study-movement-of-firefighting-chemicals-in-watershed/>
27. Zhuikov M. "New Keillor Fellow to study movement of firefighting chemicals in watershed." *Wisconsin Sea Grant Blog*. November 11, 2019. <https://www.seagrant.wisc.edu/news/tea-and-sunlight-exploring-how-nature-breaks-down-pollution-in-the-st-louis-river/>
26. Smith J. "UW-Madison embarks on new partnership with EPA to train next generation of scientists." *Wisconsin Sea Grant Blog*. October 29, 2019. <https://www.seagrant.wisc.edu/news/uw-madison-embarks-on-new-partnership-with-environmental-protection-agency-to-train-next-generation-of-scientists/>
25. Dahdah J. "DNR finds two PFAS contamination sites, working on identifying more." *Spectrum News 1*. Aired October 17, 2019. <https://spectrumnews1.com/wi/madison/news/2019/10/17/dnr-finds-two-pfas-contamination-sites-working-on-identifying-more>
24. Hinterthuer A. "Assessing how long chemicals linger in lakes." *UW-Madison Center for Limnology Blog*. July 3, 2019. <http://blog.limnology.wisc.edu/assessing-how-long-chemicals-linger-in-lakes/>
23. Smith J.A. "UW changes lives: Study looks at drinking water safety in Wisconsin." *University of Wisconsin News*. April 4, 2019. <https://news.wisc.edu/study-examines-groundwater-chemistry-drinking-water-safety-in-wisconsin/>
22. Smith J.A. "Remucal's research furthers knowledge about drinking water safety, particularly from groundwater." *Aquatic Sciences Chronicle*. Volume 2, 2019. <https://www.wri.wisc.edu/news/remucals-research-furthers-knowledge-about-drinking-water-safety-particularly-from-groundwater/>
21. Sedlak D.L. "Environmental Science & Technology and Environmental Science & Technology Letters Virtual Issue: Early Career Scientists" <http://acspubs.co/WrwE30o9HhL>
20. Carrington S. "Outstanding reviewers for *Environmental Science: Processes & Impacts* in 2018" *RSC Publishing Blog*. March 20, 2019. <http://blogs.rsc.org/em/2019/03/20/outstanding-reviewers-for-environmental-science-processes-impacts-in-2018/>
19. Ziemer T. "Swiss sabbatical opens new opportunities." *University of Wisconsin College of Engineering News*. March 12, 2019. <https://www.engr.wisc.edu/swiss-sabbatical-opens-new-opportunities/>
18. McNeill K., Neil S., and Darby C. (2019) Outstanding reviewers for *Environmental Science: Processes & Impacts* in 2018. *Environmental Science: Processes & Impacts*, 21, 780.
17. Zhuikov M. "New projects address Wisconsin groundwater resources." *Aquatic Sciences Chronicle*. Volume 3, 2018. <https://aqua.wisc.edu/chronicle/Default.aspx?tabid=687>

16. Logan B.E. (2018) *Environmental Science & Technology Letters* presents the 2018 excellence in review awards. *Environmental Science & Technology Letters*, 5, 621-621. DOI: 10.1021/acs.estlett.8b00532.
15. **Remucal C.K.** "Congratulations to GRC Environmental Sciences: Water poster winners." *Association of Environmental Engineering and Science Professors Newsletter*. October 2018. 53(3), 20.
14. Andrews M. "Announcing a themed collection – Celebrating excellence in research: 100 women of chemistry." *RSC Publishing Blog*. August 24, 2018.
http://blogs.rsc.org/rscpublishing/2018/08/24/announcing-a-themed-collection-celebrating-excellence-in-research-100-women-of-chemistry/?doing_wp_cron=1541679244.0001211166381835937500
13. Barrilleaux A. "Widely used chemicals detected in two Madison wells." *City of Madison – Madison Water Utility Press Release*. July 27, 2018. <https://www.cityofmadison.com/water/insidemwu/widely-used-chemicals-detected-in-two-madison-wells>
12. Harrington M. "Wisconsin Sea Grant announces \$2.8 million to fund Great Lakes research, including eight projects at UW-Madison." *University of Wisconsin Sea Grant Institute Press Release*. March 29, 2018. <http://seagrant.wisc.edu/home/Default.aspx?tabid=561&PostID=2652&Mode=View>
11. Cushman W. "Glass half full: Improving the world's water." *Perspective*. Spring 2017: 10-15. Print.
10. Sedlak D.L. (2016) *Environmental Science and Technology* presents the 2016 reviewer awards. *Environ. Sci. Technol.* 50, 11433-11434.
9. Bowley L. "Emerging investigator series: Christy Remucal." *Environmental Science: Water Research & Technology Blog*. June 6, 2016. <http://blogs.rsc.org/ew/2016/06/07/emerging-investigator-series-christy-remucal/>
8. Harrington M. "Wisconsin Sea Grant announces \$3.9 million to fund Great Lakes research, including six projects at UW-Madison." *University of Wisconsin Sea Grant Institute Press Release*. February 22, 2016. <http://www.seagrant.wisc.edu/Home/AboutUsSection/PressRoom/Details.aspx?PostID=2275>
7. Lepisto M. "Water research helps manage critical resource in ever-changing world." *In Common*. Spring/Summer 2015. <http://nelson.wisc.edu/news/in-common/spring-summer2015/story.php?s=1492>
6. Gordon S. "Christy Remucal receives NSF CAREER Award." *University of Wisconsin Engineering Newsnotes*. January 30, 2015. <http://www.engr.wisc.edu/news/archive/2015/jan03-remucal-career-award.html>
5. Zhuikov M. "Turning a Water Nuisance into a Water Cleanser: Water Resources Institute Project Looks at Manganese in the Madison Water System." *Water Resources Institute Newsletter*. January 23, 2015. <http://www.wri.wisc.edu/pressroom/Details.aspx?PostID=1200>
4. Delgado-Saborit J. M., Park, H.-D., and Cwiertny D. M. (2014) Emerging investigators: profiles of the contributors. *Environ. Sci. Process. Impacts*. 16, 1171-1181, DOI: 10.1039/C4EM90019G.
3. McNeill K. (2014) Themed issue on aquatic photochemistry. *Environ. Sci. Process. Impacts*. 16, 626-627, DOI: 10.1039/C4EM90009J.
2. **Remucal, C.K.** "A new perspective: Applying aquatic chemistry to solve our water quality problems." *Perspective*. Spring 2013: 34-25. Print.
1. Meiller, R. "Focus on new faculty: Christy Remucal, optimizing ways to remove contaminants from water." *University of Wisconsin Engineering Newsnotes*. April 30, 2013. <http://www.engr.wisc.edu/news/archive/2013/Apr30.html>.

RESEARCH GRANTS AND FUNDING

Extramural Research Grants Funded	(total at University of Wisconsin, Madison = \$8,981,777*)
33. NIST (Federal Appropriation) 2024 <i>University of Wisconsin Madison PFAS Center of Excellence Analytical Laboratory Equipment Upgrades</i> (PI: Remucal, Lazarcik)	\$963,000
32. National Science Foundation 2024	\$45,000

- Support for the 2024 Gordon Research Conference on Environmental Sciences: Water (PI: Remucal, Lohmann, Hofstetter)*
31. National Institutes of Health | 2023 \$16,000
Support for the 2024 Gordon Research Conference on Environmental Sciences: Water (PI: Remucal, Lohmann)
 30. National Science Foundation | 2023 \$428,171
Collaborative Research: Establishing the role of photodegradation in the fate of organic contaminants in aquatic systems (PI: Remucal, Wammer)
 29. Wisconsin Groundwater Coordinating Council | 2023 \$287,621
The role of water table fluctuations on PFAS mobility into groundwater systems (PI: Zahasky, Remucal)
 28. SERDP | 2022 \$270,270
Surface-enhanced Raman spectroscopic analysis of per- and polyfluoroalkyl substances in firefighting foams (PI: Wei, Remucal)
 27. Midwest Aquatic Plant Management Society | 2022 \$6,000
Characterizing the fate and transport of floryprauxifen, the primary degradation product of emerging aquatic herbicide floryprauxifen-benzyl (PI: Van Frost, McMahon Remucal)
 26. Wisconsin Groundwater Coordinating Council | 2022 \$181,106
Characterization of disperse PFAS sources to groundwater using targeted and non-targeted analyses (PI: Remucal, Shafer)
 25. USGS National Institutes of Water Resources | 2021 \$250,000 (+\$250,000 match)
Quantifying multi-media loadings of PFAS in the Great Lakes basin using targeted and non-targeted analyses (PI: Remucal, Shafer, Corsi, Elliot)
 24. National Science Foundation | 2021 \$250,000
EAGER: Inexpensive and rapid detection of per- and polyfluoroalkyl substances in drinking water supplies using macrocycle-functionalized gold nanoparticles (PI: Wei, Remucal)
 23. Wisconsin Sea Grant | 2021 \$238,614
Impact of air-water interface partitioning on per- and polyfluoroalkyl substances (PFAS) fate in surface waters of the Great Lakes (PI: Remucal)
 22. National Science Foundation | 2021 \$334,908
Evaluation of the fundamental photochemical mechanisms driving carbonyl sulfide and carbon disulfide formation in sunlit natural waters (PI: Shah, Remucal)
 21. National Science Foundation | 2021 \$326,446
Identifying the role of dissolved organic matter composition in complete and partial photooxidation in diverse lakes (PI: Remucal)
 20. Wisconsin Department of Natural Resources | 2021 \$191,715 (+\$59,815 match)
Photodegradation and long-term persistence of fluridone in whole-lake treatment (PI: White, McMahon Remucal)
 19. Midwest Aquatic Plant Management Society | 2021 \$5,000
Photodegradation and long-term persistence of fluridone in whole-lake treatment (PI: White, McMahon Remucal)
 18. National Science Foundation | 2020 \$7,680,000*
LTER: Comparative study of a suite of lakes in Wisconsin (PI: Stanley; Remucal is one of 20+ co-PIs)
 17. National Science Foundation | 2020 \$335,118
Impact of dissolved organic matter on phenolic contaminant oxidation by manganese oxides (PI: Ginder-Vogel, Remucal)
 16. Wisconsin Sea Grant | 2019 \$276,906
Sources and fate of per- and polyfluoroalkyl substances (PFAS) in Green Bay and Lake Michigan (PI: Remucal)

15. Great Lakes Fishery Commission | 2018 \$321,729
The role of hyporheic exchange in the environmental fate of lampricides (PI: Remucal, Ward).
14. National Science Foundation – Environmental Engineering | 2017 \$330,014
Linking dissolved organic matter composition to photochemical reactivity (PI: Remucal, Wammer)
13. US Environmental Protection Agency | 2018 \$1,999,990*
Training the Next Generation of Scientists to Protect Human Health and the Environment: A Collaboration of UW-Madison and EPA MED (PIs: Hurley, Remucal, McIntyre, Hauxwell; Co-PIs: Block, Carpenter, Dugan, Ginder-Vogel, Hanson, Loheide, McMahon, Pedersen, Stanley, VanderZanden).
12. Wisconsin Department of Natural Resources | 2018 \$252,428
The role of microbes and sunlight in the fate of 2,4-D during Eurasian watermilfoil whole-lake treatments (PI: Remucal, McMahon).
11. Wisconsin Groundwater Coordinating Council | 2018 \$109,357
The impact of dissolved organic matter composition on the formation of disinfection by-products in groundwater (PI: Remucal)
10. Wisconsin Sea Grant | 2016 \$230,562
The role of indirect photolysis in the environmental fate of pesticides and pharmaceuticals in the St. Louis River Estuary (PI: Remucal, Wammer)
9. National Science Foundation – Environmental Engineering | 2015 \$328,059
Applying surface chemical approaches to elucidate the oxidation mechanisms of organic pollutants by manganese oxides (PI: Ginder-Vogel, Remucal), Award No. 1509879.
8. National Science Foundation – CAREER | 2015 \$500,064
CAREER: An adaptive approach to oxidize emerging contaminants in our drinking water (PI: Remucal), Award No. 1451932.
7. Great Lakes Fishery Commission | 2015 \$117,896
Demonstration of the photodegradation of lampricides to form benign products during in situ dosing (PI: Remucal, Hubert)
6. National Science Foundation | 2014 \$4,012,651*
ILTER: Comparative study of a suite of lakes in Wisconsin (PI: Stanley; Remucal is one of 20+ co-PIs)
5. Great Lakes Fishery Commission | 2014 \$50,069
The aqueous photolysis of niclosamide (PI: Remucal, Hubert)
4. Wisconsin Groundwater Coordinating Council | 2013 \$105,734
Effect of source chemistry on Mn-bearing solid dissolution and reactivity (PI: Ginder-Vogel, Remucal)
3. Wisconsin Sea Grant | Development Grant | 2011 \$50,000
The role of indirect photochemical degradation in the environmental fate of lampricides (PI: Remucal)
2. ETH Zürich | Postdoctoral Fellowship | 2010 \$300,000
1. National Science Foundation | Graduate Research Fellowship | 2003 \$119,000

*The LTER funding and EPA training grants are not included in award total.

**Required cost-shares/match not included in award total.

Intramural Research Grants Funded (total at University of Wisconsin, Madison = \$1,512,071)

27. UW-Madison Core Revitalization Program | 2024 \$464,621
Replacement and upgrade of a critical liquid chromatograph-tandem mass spectrometer for analysis of environmental contaminants (PI: Remucal, Lazarcik, Ginder-Vogel, Wei, Zahasky)
26. Office of the Vice Chancellor for Research and Graduate Education | 2023 \$90,000
PFAS in the Great Lakes (PI: Remucal)
25. H.I. Romnes Faculty Fellowship | 2023 \$60,000
24. University of Wisconsin, Madison Graduate School | Fall Competition | 2022 \$55,681

- Establishing the role of photodegradation in the fate of organic contaminants in aquatic systems (PI: Remucal)* (This award was insurance against an NSF proposal and was declined.)
23. University of Wisconsin, Madison Graduate School | Travel Award | 2022 \$1,000
ACS Conference, March 2022, San Diego, CA
 22. University of Wisconsin, Madison | Instructional Continuity Small Grant Award | 2021 \$5,000
Supporting engineering education during COVID-19 (PI: Remucal, Ginder-Vogel)
 21. University of Wisconsin, Madison | Pandemic Affected Research Continuation | 2020 \$43,000
The role of hyporheic exchange in the environmental fate of lampricides; Linking dissolved organic matter composition to photochemical reactivity (PI: Remucal)
 20. University of Wisconsin, Madison Graduate School | Travel Award | 2020 \$1,000
ACS Conference, March 2020, Philadelphia, PA
 19. University of Wisconsin, Madison Graduate School | Fall Competition | 2019 \$41,878
Predicting carbon emissions from freshwater lakes due to photo- and biodegradation of dissolved organic matter (PI: Remucal)
 18. University of Wisconsin-Madison UW2020 Initiative | 2018 \$498,620
Building excellence in water analysis (PI: Ginder-Vogel, Hurley, Remucal)
 17. University of Wisconsin, Madison | Anna Grant Birge Award | 2019 \$2,000
Sampling campaign for 2,4-D fate experiments (White)
 16. University of Wisconsin, Madison | Anna Grant Birge Award | 2019 \$1,956
Sampling campaign for DOM photochemical experiments (Berg)
 15. University of Wisconsin, Madison Graduate School | Fall Competition | 2017 \$42,170
The role of dissolved organic matter composition in the formation of disinfection by-products during chlorination (PI: Remucal) (This award was insurance against a Wisconsin Groundwater Coordinating Council proposal and was declined.)
 14. University of Wisconsin, Madison Graduate School | Travel Award | 2017 \$1,000
ACS Conference, March 2018, New Orleans, LA
 13. University of Wisconsin, Madison | Hilldale Undergraduate Research Fellowship | 2017 \$1,000
Degradation of bisphenol A by manganese oxides (Campagnola)
 12. University of Wisconsin, Madison | Anna Grant Birge Award | 2017 \$1,191
Sampling campaign for DOM photochemical experiments (Berg)
 11. University of Wisconsin, Madison Graduate School | Fall Competition | 2015 \$38,823
Molecular composition and photochemical reactivity of dissolved organic matter in the St. Louis River Estuary (PI: Remucal)
 10. University of Wisconsin, Madison | Anna Grant Birge Award | 2015 \$1,000
Sampling campaign for lampricide photochemical experiments (McConville)
 9. University of Wisconsin, Madison Graduate School | Travel Award | 2015 \$1,000
AEESP Conference, June 2015, New Haven, Connecticut
 8. University of Wisconsin, Madison Graduate School | Fall Competition | 2014 \$39,424
An adaptive approach to oxidize emerging contaminants in our drinking water (PI: Remucal)
(This award was insurance against an NSF CAREER proposal and was declined.)
 7. University of Wisconsin, Madison | Anna Grant Birge Award | 2014 \$1,179
Sampling campaign for DOM photochemical experiments (Maizel)
 6. University of Wisconsin, Madison Graduate School | Fall Competition | 2013 \$33,844
The effect of water chemistry on the photodegradation of pesticides and pharmaceuticals (PI: Remucal)
 5. Sustainability Innovation in Research and Teaching (SIRE) | 2013 \$50,000
Water, sustainability and green infrastructure: A model 21st century campus by 2025 (PI: LaGro, Co-PIs: Ginder-Vogel, Harrington, Likos, Loheide, Remucal)
 4. University of Wisconsin, Madison | Holstrom Environmental Scholarship | 2013 \$1,000

Photodegradation of 3-trifluoromethyl-4-nitrophenol and 5-chloro-N-(2-chloro-4-nitrophenyl)-2-hydroxy-benzamide (Linde)

3. University of Wisconsin, Madison | Anna Grant Birge Award | 2013 \$790
Sampling campaign for lampricide photochemical experiments (McConville)
2. University of Wisconsin, Madison Graduate School | Travel Award | 2013 \$1,000
American Chemical Society Spring Meeting, April 2013, New Orleans, Louisiana
1. University of Wisconsin, Madison Graduate School | Fall Competition | 2012 \$34,112
The photochemical behavior of dialysis-isolated size fractions of dissolved organic matter in natural waters

Research Grant Applications Pending

2. National Science Foundation | Engineering Research Center | 2024 N/A for pre-proposal
NSF Engineering Research Center for Treatment, Replacement, Re-use, Analysis, Containment and pre-treatment, and Education (TRRACE) of PFAS (PI: Stark, McNeil, Ng, Novosselov, Remucal)
1. University of Wisconsin, Madison Graduate School | Fall Competition | 2024 \$61,460
Combining advanced mass spectrometry and computational approaches to characterize dissolved organic matter (PI: Remucal)

PRESENTATIONS

Invited Research Seminars

<u>Location</u>	<u>Department</u>	<u>Seminar Date</u>
1. University of Wisconsin-Madison	Wisconsin Idea Seminar	May 21, 2013
2. University of St. Thomas	Chemistry Department	Oct. 11, 2013
3. University of Wisconsin-Milwaukee	School of Freshwater Sciences	Apr. 3, 2014
4. Marquette University	Environmental Engineering	Apr. 15, 2015
5. Gustavus Adolphus College	Department of Chemistry	May 8, 2015
6. Northwestern University	Environmental Engineering	May 29, 2015
7. University of Wisconsin-Madison	Chemistry Department	Oct. 13, 2016
8. University of Iowa	Environmental Engineering	Oct. 21, 2016
9. University of Michigan	Environmental Engineering	Oct. 28, 2016
10. University of Minnesota	Civil, Environmental, and Geo- Engineering	Nov. 11, 2016
11. US Geological Survey	Middleton, WI	Dec. 5, 2016
12. Stanford University	Environmental Engineering	Apr. 6, 2017
13. University of Wisconsin-Madison	Water@UW-Madison Symposium	May 9, 2017
14. University of Wisconsin-Madison	Grainger Institute	Feb. 22, 2018
15. University of Wisconsin-Madison	Wednesday Nite @ the Lab	Apr. 18, 2018
14. ETH Zürich	Biogeochemistry & Pollutant Dynamics	Nov. 16, 2018
15. Université de Lausanne	Earth Surface Dynamics	Dec. 5, 2018
16. Eawag	Institute Seminar	Mar. 22, 2019
17. EPFL	Environmental Engineering Institute	Mar. 26, 2019
18. ETH Zürich	Biogeochemistry & Pollutant Dynamics	May 21, 2019
19. Universität Tübingen	Center for Applied Geoscience	May 24, 2019
20. University of Wisconsin-Madison	WISE Seminar	Nov. 19, 2019
21. University of Wisconsin-Madison	Water@UW-Madison Symposium, Keynote	Nov. 20, 2019
22. Yahara Lakes 101 Science Café	Women in Water & Sustainability	Feb. 3, 2020
23. Northwestern University	Environmental Engineering	Mar. 13, 2020 [†]
24. University of Wisconsin-Madison	Water@UW-Madison Symposium	May 5, 2020
25. WI Department of Natural Resources	PFAS Workgroup	May 20, 2020
26. University of California, Davis	Agricultural and Environmental Chemistry	Nov. 2, 2020
27. Northwestern University	Environmental Engineering	Nov. 6, 2020
28. US Environmental Protection Agency	Great Lakes Water Quality Group	Nov. 19, 2020
29. WI Department of Natural Resources	PFAS Workgroup	Dec. 8, 2020
30. Environment, Great Lakes & Energy	Michigan PFAS Action Response Team	Dec. 18, 2020

31.	Great Lakes Consortium for Fish Consumption Advisories	Jan. 12, 2021
32.	US Environmental Protection Agency Great Lakes Toxicology & Ecology Division	Apr. 21, 2021
33.	University of Wisconsin-Madison Water@UW-Madison Symposium	May 7, 2021
34.	University of Pittsburgh Environmental Engineering	Sept. 17, 2021
35.	University of Wisconsin-Madison <u>Wednesday Nite @ the Lab</u>	Sept. 22, 2021
36.	Massachusetts Institute of Technology Environmental Engineering	Oct. 15, 2021
37.	Yahara Watershed Volunteer Gathering Virtual Symposium	Oct. 30, 2021
38.	Doug LaFollette Environmental Speakers Program	Dec. 3, 2021
39.	WI Department of Natural Resources PFAS Workgroup	Jan. 19, 2022
40.	Grinnell College Chemistry	Feb. 17, 2022
41.	University of Buffalo Environmental & Water Resources Eng.	Mar. 4, 2022
42.	University of Wisconsin-Madison Water@UW: Water Challenges Panel	Apr. 21, 2022
43.	University of Wisconsin-Madison University Round Table	Dec. 14, 2022
44.	WI Department of Natural Resources PFAS Workgroup	Feb. 16, 2023
45.	University of Wisconsin-Madison Food Research Institute	May 16, 2023
46.	University of Wisconsin-Madison Wednesday Nite @ the Lab	Sept. 13, 2023
47.	WI Department of Natural Resources PFAS Learning Series	Aug. 15, 2024
48.	WI Department of Natural Resources PFAS External Advisory Group	Oct. 18, 2024

‡ Canceled due to COVID-19

Invited Presentations to Legislators

	<u>Topic</u>	<u>Office / Committee</u>	<u>Webinar Date</u>
1.	PFAS in the Great Lakes	Rep. Kristina Shelton, Climate Roundtable	Jan. 23, 2023
2.	PFAS Informational Hearing	WI Senate Committee on Natural Resources	Jan. 31, 2023

Invited Webinars

	<u>Topic</u>	<u>Organization</u>	<u>Webinar Date</u>
1.	Emerging Contaminants	Great Lakes Sea Grant	Jan. 10, 2019
2.	PFAS in Wisconsin	Water Action Volunteers	Jan. 22, 2020
3.	Emerging Contaminants	Great Lakes Sea Grant	Apr. 20, 2022
4.	PFAS Risk & Exposure	Illinois-Indiana Sea Grant	Mar. 8, 2023
5.	PFAS in the Great Lakes	Federation of Environmental Technologists	May 25, 2023

Conference Presentations

(* denotes the presenting author, Remucal advisees are underlined, † denotes conferences/meetings that were canceled due to COVID-19)

106. Pomazal R.*, Malecki K., Stanton N., Shelton B., Lange M., Irving R., Meiman J., **Remucal C.K.**, Cochran A., and Schultz A. | Determinants of per- and polyfluoroalkyl substances (PFAS) exposure among Wisconsin residents | International Society for Environmental Epidemiology Annual Meeting | Santiago, Chile | August 25, 2024.
105. **Remucal C.K.*** | Advancing PFAS research & outreach in Wisconsin: Fate & transport of PFAS in the Great Lakes | Sea Grant Week | Savannah, GA | August 20, 2024.
104. Runge L.*, Halstead G., **Remucal C.K.**, and Zahasky C. | PFAA transport in the vadose zone: Results from meter-scale experiments and implications for upscaling | Wisconsin Section of the American Water Resources Association | Appleton, WI | April 25, 2024.
103. Swenson J.*, Ginder-Vogel M., and **Remucal C.K.** | *Spectroscopic investigation of interactions between phenolic contaminants and dissolved organic matter during oxidation by manganese oxides* | American Chemical Society National Meeting | New Orleans, LA | March 19, 2024.
102. Cho S.W.*, **Remucal C.K.**, and Wei H. | *Development of supramolecular macrocycle-functionalized SERS substrates for the sensitive and selective detection of PFAS in mixtures and natural water* | American Chemical Society National Meeting | New Orleans, LA | March 17, 2024.
101. Angell L.*, Ward A., and **Remucal C.K.** | *Synthesizing laboratory, field, and in-situ studies to investigate the role of photodegradation in the environmental fate of 3-trifluoromethyl-4-nitrophenol* | American Chemical Society National Meeting | New Orleans, LA | March 17, 2024.

100. Kostelnik E.* and **Remucal C.K.** | *Identifying the reactivity of photochemically produced reactive intermediates with dissolved organic matter* | American Chemical Society National Meeting | New Orleans, LA | March 17, 2024.
99. Cho S.W.*, **Remucal C.K.**, and Wei H. | *The influence of molecular structure on the Raman spectral pattern and reproducibility of per- and polyfluoroalkyl substances in liquid extracts* | SciX | Sparks, NV | October 11, 2023.
98. **Remucal C.K.*** | *Molecular level changes in dissolved organic matter during oxidative processes* | Gordon Research Conference on Water Disinfection, Byproducts, and Health | South Hadley, MA | July 31, 2023. (Invited)
97. Swenson J.T.*, Ginder-Vogel M., and **Remucal C.K.** | *Interactions of dissolved organic matter and phenolic contaminants during oxidation by acid birnessite* | American Chemical Society National Meeting | Indianapolis, IN | March 27, 2023.
96. Van Frost S.*, White A., McMahon K.D., and **Remucal C.K.** | *Quantifying the contribution of photodegradation to the fate of flrpyrauxifen-benzyl, an emerging aquatic herbicide, in freshwater environments* | American Chemical Society National Meeting | Indianapolis, IN | March 27, 2023.
95. **Remucal C.K.***, Trainer E., Swenson J.T., and Ginder-Vogel M. | *Reactivity of manganese oxides with phenolic moieties in organic contaminants and dissolved organic matter* | American Chemical Society National Meeting | Indianapolis, IN | March 26, 2023. (Invited)
94. Bulson E.*, **Remucal C.K.**, and Hicks A. | *Evaluation of per- and polyfluoroalkyl substances in metal shredder residue: Preliminary results* | International Conference on Industrial Ecology | Leiden, Netherlands | July 3, 2023.
93. Cho S.W.*, **Remucal C.K.**, and Wei H. | *Establishing a reproducible Raman spectral library for per- and polyfluoroalkyl substances extracted in organic solvents* | Association of Environmental Engineering and Science Professors Meeting | Boston, MA | June 21, 2023.
92. **Remucal C.K.***, Sherman S., and Kostelnik E. | *Accumulation of PFAS at the surface microlayer and in naturally occurring foams and organic matter* | Association of Environmental Engineering and Science Professors Meeting | Boston, MA | June 21, 2023.
91. Sherman S.* and **Remucal C.K.** | *PFAS partitioning at the air-water interface in Wisconsin waters* | Emerging Contaminants in the Environment Conference | Champaign, IL | April 18, 2023.
90. Angell L.*, Ward A., and **Remucal C.K.** | *Synthesizing laboratory, field, and in situ studies to determine environmental fate of polar organic compounds* | Emerging Contaminants in the Environment Conference | Champaign, IL | April 18, 2023.
89. Gruber K.*, Bieber S., Corsi S., Elliott S., Shafer M., and **Remucal C.K.** | *Tributary loading of PFAS to Lake Superior* | Emerging Contaminants in the Environment Conference | Champaign, IL | April 18, 2023.
88. D'Andrilli J.*, Hawkes J.A., Podgorski D.C., Agar J.N., Barrow MP., Berg S.M., Catalán N., Chen H., Chu R.K., Cole R.B., Dittmar T., Gavard R., Gleixner G., Hatcher P.G., He C., Hess N.J., Hutchins R.H.S., Ijaz A., Jones H.E., Kew W., Khaksari M., Palacio Lozano D.C., Lv J., Mazzoleni L.R., Noriega-Ortega B.E., Osterholz H., Radoman N., **Remucal C.K.**, Schmitt N.D., Schum S.K., Shi Q., Simon C., Singer G., Sleighter R.L., Stubbins A., Thomas M.J., Tolic N., Zhang S., and Zito, P. | *An international laboratory comparison of dissolved organic matter composition by high resolution mass spectrometry: Are we getting the same answer?* | ASLO Aquatic Sciences Meeting | Palma de Mallorca, Spain | June 5, 2023. (Invited)
87. Balگوoyen S.* and **Remucal C.K.** | *Impact of environmental and engineered processes on per- and polyfluoroalkyl substance fingerprints from an aqueous film forming foam manufacturer near Lake Michigan* | SETAC | Pittsburgh, PA | November 15, 2022.
86. Wammer K.H.*, **Remucal C.K.**, Berg S.M., Kelly I.M., Knellwolf C.D., and Larson C.J. | *Photochemical reactivity and contaminant transformation in a diverse set of natural waters.* | Midwest American Chemical Society Meeting | Iowa City, IA | October 20, 2022.
85. Angell L.D.* and **Remucal C.K.** | *Determining the fate of lampricides in aquatic systems using a multi-tracer approach.* | Midwest American Chemical Society Meeting | Iowa City, IA | October 20, 2022.

84. Berg S.M.*, Peterson B.D., McMahon K., and **Remucal C.K.** | *Photochemical reactions alter dissolved organic matter composition in a stratified, eutrophic lake.* | Midwest American Chemical Society Meeting | Iowa City, IA | October 20, 2022.
83. Milstead R.* and **Remucal C.K.** | *Dissolved organic matter composition influences its susceptibility to complete and partial photooxidation within lakes.* | Midwest American Chemical Society Meeting | Iowa City, IA | October 20, 2022.
82. **Remucal C.K.***, Berg S., and Wammer K. | *Predicting dissolved organic matter photoreactivity by its molecular composition, optical properties, and redox activity* | Midwest American Chemical Society Meeting | Iowa City, IA | October 20, 2022. (Invited)
81. Swenson J.T.*, Ginder-Vogel M., and **Remucal C.K.** | *Reaction of organic contaminants with acid birnessite altered by dissolved organic matter and water chemistry* | American Chemical Society National Meeting | Chicago, IL | August 23, 2022.
80. Milstead R.P.*, Horvath E., and **Remucal C.K.** | *Dissolved organic matter composition influences its susceptibility to complete and partial photooxidation within lakes* | Gordon Research Seminar Environmental Sciences: Water | Holderness, NH | June 18, 2022.
79. Van Frost S.*, White A., McMahon K.D., and **Remucal C.K.** | *Quantifying the susceptibility of emerging aquatic herbicides to photodegradation and sorption in freshwater environments* | Emerging Contaminants in the Environment Conference | virtual | April 28, 2022.
78. Swenson J.T.*, **Remucal C.K.**, and Ginder-Vogel, M. | *Influence of diverse dissolved organic matter on the oxidation of phenolic contaminants by acid birnessite* | American Chemical Society National Meeting | San Diego, CA | March 23, 2022.
77. **Remucal C.K.***, Milstead R., and von Gunten U. | *Molecular-level transformation of dissolved organic matter during disinfection processes* | American Chemical Society National Meeting | San Diego, CA | March 22, 2022. (Invited)
76. Milstead R.* and **Remucal C.K.** | *Dissolved organic matter composition influences its susceptibility to complete and partial photooxidation within lakes* | American Chemical Society National Meeting | San Diego, CA | March 21, 2022.
75. Swenson J.T.*, **Remucal C.K.**, and Ginder-Vogel, M. | *Influence of diverse dissolved organic matter on the oxidation of phenolic contaminants by acid birnessite* | Wisconsin AWRA Annual Meeting | virtual | March 10, 2022.
74. Francissen P.J.* , Ward A.S., Helgemoe B.J.M., **Remucal C.K.**, and Becker P.S. | *Integrated field tracer – laboratory batch experimental approach improves predictions of the fate of trace organic compound in stream-hyporheic system* | American Geophysical Union National Meeting | New Orleans, LA | December 15, 2021.
73. **Remucal C.K.*** and Balگوoyen S. | *The role of tributaries and sediments as a source of PFAS to a large bay of Lake Michigan* | Emcon | Seattle, WA | September 14, 2021. (virtual)
72. **Remucal C.K.*** and Milstead R. | *The impact of dissolved organic matter composition on disinfection by-products in groundwater* | International Humics Substances Society Conference | Estes Park, CO | August 18, 2021. (virtual)
71. **Remucal C.K.*** | *Environmental contamination of PFAS in Wisconsin (Keynote)* | Setting a Research Agenda for PFAS in Wisconsin | Madison, WI | July 29, 2021. (virtual)
70. Risch A.B.* , Beer K.E., Kelly I.M., **Remucal C.K.**, Berg S.M., and Wammer K.H. | *Contributions of photochemically-produced reactive intermediates to contaminant photodegradation in natural surface waters* | Emerging Contaminants in the Environment Conference | Virtual Conference | April 27, 2021. (virtual)
69. Beer K.E.* , Risch A.B., Kelly I.M., Berg S.M., **Remucal C.K.**, and Wammer K.H. | *Linking dissolved organic matter composition to photodegradation of select contaminants* | Emerging Contaminants in the Environment Conference | Virtual Conference | April 27, 2021. (virtual)
68. Berg S.M.*, Wammer K.H., and **Remucal C.K.** | *Influence of dissolved organic matter composition and electron-donating capacity on the photochemical formation of reactive intermediates in diverse waters contaminants* | American Chemical Society National Meeting | Virtual Conference | April 8, 2021. (virtual)

67. Wammer K.H.*, **Remucal C.K.**, Berg S.M., Beer K.E., Kelly I.M., and Risch A.B. | *Linking dissolved organic matter composition to photochemical reactivity and contaminant transformation* | American Chemical Society National Meeting | Virtual Conference | April 8, 2021. (virtual)
66. Helgemoe B.J.M.*, Francissen P.J., Ward A.S., and **Remucal C.K.** | *The role of hyporheic exchange in the environmental fate and transport of the lampricide 3-trifluoromethyl-4-nitrophenol* | American Chemical Society National Meeting | Virtual Conference | April 6, 2021. (virtual)
65. Milstead R.P.* and **Remucal C.K.** | *Using high-resolution mass spectrometry to identify novel disinfection by-products and precursors* | American Chemical Society National Meeting | Virtual Conference | April 6, 2021. (virtual)
64. White A.M.*, **Remucal C.K.**, and McMahon K.D. | *2,4-D degradation in lakes following whole-lake treatments* | Wisconsin Water Week | Virtual Conference | March 9, 2021. (virtual)
63. Balگوoyen S.* and **Remucal, C. K.** | *Sources of PFAS in Green Bay*. State of the Bay: Water Quality & Public Health Virtual Press Briefing | Green Bay, WI | September 29, 2020. (virtual)
62. Trainer E.L.*, **Remucal C.K.**, and Ginder-Vogel M. | *Mechanistic interactions of phenolic contaminants and dissolved organic matter with manganese oxides* | American Geophysical Union Fall Meeting | December 1, 2020. (virtual)
61. White A.M.*, **Remucal C.K.**, and McMahon K. | *Synthesizing lab and field experiments to quantify dominant herbicide transformation mechanisms in aquatic environments.* | SETAC North America | Fort Worth, TX | November 15, 2020. (virtual)
60. **Remucal C.K.*** and Milstead R. | *Formation of novel disinfection by-products in drinking water in Wisconsin* | Wisconsin American Water Works Association Conference | Madison, WI | September 17, 2020. (virtual)
59. **Remucal C.K.*** and Milstead R. | *The impact of dissolved organic matter composition on the formation of disinfection by-products in groundwater* | International Humic Substances Society Conference | Estes Park, CO | August 18, 2020.‡
58. Wammer K.H.*, **Remucal C.K.**, Berg S.M., Herrli J.A., Winkels R., Beer K.E., and Risch A.B. | *Linking dissolved organic matter composition to photochemical reactivity and contaminant transformation* | International Humic Substances Society Conference | Estes Park, CO | August 18, 2020.‡
57. Balگوoyen S.* and **Remucal C.K.** | *Sources and fate of PFAS in Green Bay and Lake Michigan* | Green Bay Conservation Roundtable | Green Bay, WI | April 23, 2020. (virtual)
56. White, A.M.*, **Remucal, C.K.**, and McMahon, K.D. | *New insights into the degradation of 2,4-dichlorophenoxyacetic acid* | Wisconsin Lakes and Rivers Convention | April 2, 2020. (virtual)
55. Milstead R.* and **Remucal C.K.** | *Impact of dissolved organic matter composition on the formation of regulated and novel disinfection byproducts during chlorination* | American Chemical Society National Meeting | Philadelphia, PA | March 25, 2020.‡
54. **Remucal C.K.*** and Bulman D.M. | *Impact of halogen radicals on dissolved organic matter transformation during chlorine photolysis* | American Chemical Society National Meeting | Philadelphia, PA | March 25, 2020.‡
53. White A.*, McMahon K.D., and **Remucal C.K.** | *New insights to the degradation of 2,4-dichlorophenoxyacetic acid when applied whole-lake treatments* | American Chemical Society National Meeting | Philadelphia, PA | March 24, 2020.‡
52. **Remucal C.K.***, Berg S.M., Herrli J., Winkels R., and Wammer K.H. | *Dissolved organic matter composition and electron-donating capacity determine photochemical reactivity of diverse waters* | American Chemical Society National Meeting | Philadelphia, PA | March 24, 2020.‡
51. Trainer E.L.*, Ginder-Vogel M., and **Remucal C.K.** | *Influence of phenolic structure on contaminant oxidation by manganese oxides in complex matrices* | American Chemical Society National Meeting | Philadelphia, PA | March 23, 2020.‡
50. Trainer E.L.*, Ginder-Vogel M., and **Remucal C.K.** | *Mechanistic interactions of phenolic contaminants with manganese oxides* | Soil Science Society of America International Annual Meeting | San Antonio, TX | November 13, 2019.
*This presentation received an "Oral Presentation Award" at the conference.
49. White A.M., **Remucal C.K.**, and McMahon K.D | *Using citizen science to increase herbicide monitoring data across the state of Wisconsin* | SETAC North America | Toronto, Canada | November 4, 2019.

48. Ginder-Vogel M., Balgooyen S., and **Remucal C.K.** | *Phenolic contaminant interactions with Mn(III/IV) oxides* | Soil Science Society of America International Annual Meeting | San Antonio, TX | November 13, 2019.
47. White A.M., **Remucal C.K.**, and McMahon K.D | *Microbial and photodegradation of 2,4-D* | Science in the Northwoods | Boulder Junction, WI | October 10, 2019.
46. Trainer E.L.*, Ginder-Vogel M., and **Remucal C.K.** | *Kinetics and mechanisms of phenolic contaminant oxidation by environmentally-relevant manganese oxides* | American Chemical Society National Meeting | Orlando, FL | April 1, 2019.
45. Bulman D.* and **Remucal C.K.** | *Impact of pH and wavelength on the production of reactive oxidants during chlorine photolysis* | American Chemical Society National Meeting | Orlando, FL | March 31, 2019.
44. Berg S.M.*, Whiting Q.T., Herli J.A., Breuckman K.C., Wammer, K.H., and **Remucal C.K.** | *Photochemical reactivity of dissolved organic matter in the St. Louis River and implications for contaminant fate* | American Chemical Society National Meeting | Orlando, FL | March 31, 2019.
43. McConville M.*, Berg S.M., Mooney R.J., McIntyre P.B., and **Remucal C.K.** | *Temporal and spatial variability in organic carbon concentration in tributaries* | State of Lake Superior Conference – International Association for Great Lakes Research | Houghton, MI | October 10, 2018.
42. McConville M.*, Berg S.M., Mooney R.J., McIntyre P.B., and **Remucal C.K.** | *Temporal and spatial variability in organic carbon concentration in tributaries* | State of Lake Superior Conference – International Association for Great Lakes Research | Houghton, MI | October 10, 2018.
41. White A.*, McMahon K.D., and **Remucal C.K.** | *The role of microbes and sunlight in the fate of 2,4-D during Eurasian watermilfoil whole lake treatments* | Wisconsin Lake Partnership | Madison, WI | August 16, 2018.
40. Trainer E.L.*, Ginder-Vogel M., and **Remucal C.K.** | *Transformation of phenolic contaminants by environmentally relevant manganese oxides* | Goldschmidt | Boston, MA | August 13, 2018.
39. Balgooyen S.*, **Remucal C.K.**, and Ginder-Vogel M. | *Effect of solution conditions on bisphenol A oxidation by manganese oxides* | Goldschmidt | Boston, MA | August 13, 2018.
38. **Remucal C.K.** | *Shining light on dissolved organic matter: Applying both old and new tools to resolve composition and reactivity* | Gordon Research Conference on Environmental Sciences: Water, Holderness, NH | June 26, 2018. (Invited)
37. Berg S.*, Whiting Q.T., Herli J.A., Breuckman K.C., Wammer K.H., and **Remucal C.K.** | *The impact of dissolved organic matter on the photodegradation of atorvastatin, carbamazepine, DEET, and venlafaxine in the St. Louis River Estuary* | Emerging Contaminants in the Aquatic Environment Conference | Champaign, IL | June 5, 2018.
*This presentation received the “Best Student Oral Presentation Award” at the conference.
36. **Remucal C.K.***, Berg S., Mooney R.J., McConville M.B., and McIntyre P. | *Temporal and spatial variability in organic carbon concentration and composition in Lake Michigan tributaries* | Society for Freshwater Science Annual Meeting | Detroit, MI | May 21, 2018.
35. Leverich E.T.*, Sreenivasan K., Ginder-Vogel M., and **Remucal C.K.** | *Transformation of phenolic contaminants by environmentally-relevant manganese oxides* | SETAC Young Environmental Scientists Meeting | Madison, WI | March 27, 2018.
34. Balgooyen S.J.*, Campagnola G., **Remucal C.K.**, and Ginder-Vogel M. | *Changes in bisphenol A oxidation mechanism in the presence of manganese oxide* | American Chemical Society National Meeting | New Orleans, LA | March 21, 2018.
33. **Remucal C.K.***, Leverich E.T., and Ginder-Vogel M. | *Transformation of phenolic contaminants by environmentally-relevant manganese oxides* | American Chemical Society National Meeting | New Orleans, LA | March 21, 2018.
32. Wammer K.H.*, Whiting Q.T., Herli J.A., Berg S., and **Remucal C.K.** | *Impact of dissolved organic matter composition variability on indirect photolysis of contaminants in the St. Louis River* | American Chemical Society National Meeting | New Orleans, LA | March 18, 2018.

31. Berg S.*, Wammer K.H., and **Remucal C.K.** | *Impact of dissolved organic matter composition on the production of photochemically-produced reactive intermediates in the St. Louis River* | American Chemical Society National Meeting | New Orleans, LA | March 18, 2018.
30. **Remucal C.K.*** and Bulman D.M. | *Effect of pH and wavelength on reactive oxidant production during chlorine photolysis* | American Chemical Society National Meeting | New Orleans, LA | March 18, 2018.
29. Wammer K.H.*, Whiting Q., Berg S., and **Remucal C.K.** | *The role of indirect photolysis in the environmental fate of pesticides and pharmaceuticals in the St. Louis River* | St. Louis River Summit | Superior, WI | March 14, 2018.
28. Mooney R.J.*, McKinley G.A., Gloege L., **Remucal C.K.**, McConville M., and McIntyre P.B. | *Extensive spatiotemporal variation in nutrient concentrations of Lake Michigan's tributaries* | Society of Freshwater Science National Meeting | Raleigh, NC | June 7, 2017.
27. **Remucal C.K.***, McConville M., and Ward A. | *Photochemical fate of lampricides in tributaries of the Great Lakes* | American Chemical Society National Meeting | San Francisco, CA | April 5, 2017.
26. Balگوoyen S.*, **Remucal C.K.**, and Ginder-Vogel M. | *Mineralogical transformation of MnO₂ during redox reactions with organic contaminants* | American Chemical Society National Meeting | San Francisco, CA | April 3, 2017.
25. **Remucal C.K.***, Maizel A., and Berg S. | *Characterization of dissolved organic matter during municipal wastewater treatment* | American Chemical Society National Meeting | San Francisco, CA | April 3, 2017.
24. Manley D.* and **Remucal C.K.** | *Effect of solution conditions on reactive oxidant production during chlorine photolysis* | American Chemical Society National Meeting | San Francisco, CA | April 2, 2017.
23. Balگوoyen S.*, Ginder-Vogel M.*, and **Remucal C.K.** | *Characterization and use of manganese in Madison's drinking water aquifers* | American Water Works Association (Wisconsin Section) | Madison, WI | September 15, 2016.
22. Ginder-Vogel M.*, Balگوoyen S., and **Remucal C.K.** | *Mechanisms and products of BPA oxidation by Mn(IV) oxide* | American Chemical Society National Meeting | Philadelphia, PA | August 23, 2016.
21. Chu C.*, Lundeen R.A., **Remucal C.K.**, Sander M., and McNeill K. | *Enhanced indirect photochemistry of dissolved free and combined histidine through association with chromophoric dissolved organic matter* | American Chemical Society National Meeting | San Diego, CA | March 17, 2016.
20. Maizel A.* and **Remucal C.K.** | *Effect of experimental parameters on the apparent photochemical properties of dissolved organic matter* | American Chemical Society National Meeting | San Diego, CA | March 16, 2016.
19. **Remucal C.K.*** and Maizel A. | *Photochemical formation of reactive oxidants by size-fractionated dissolved organic matter* | American Chemical Society National Meeting | San Diego, CA | March 16, 2016.
18. Balگوoyen S.*, Chhouk B., Ginder-Vogel M., and **Remucal C.K.** | *Oxidative transformation of bisphenol A in the presence of synthetic δ -MnO₂* | American Chemical Society National Meeting | San Diego, CA | March 16, 2016.
This presentation received a Certificate of Merit for the presentation of an oral paper from the ENVR division of ACS.
17. Balگوoyen S.*, Chhouk B., Ginder-Vogel M., and **Remucal C.K.** | *Mineral surface modification of δ -MnO₂ decreases bisphenol A oxidation rate* | Soil Science Society of America | Minneapolis, MN | November 17, 2015.
16. Ginder-Vogel M.*, Balگوoyen S., Chhouk B., and **Remucal C.K.** | *Mechanisms and kinetics of organic contaminant transformation by Mn(IV) oxides* | Goldschmidt | Prague, Czech Republic | August 21, 2015. (Invited)
15. **Remucal C.K.*** and Maizel A. | *Photochemical formation of reactive oxidants by size-fractionated dissolved organic matter* | Goldschmidt | Prague, Czech Republic | August 21, 2015.
14. Chu C.*, Lundeen R.A., **Remucal C.K.**, Sander M., and McNeill K. | *Enhanced indirect photochemistry of dissolved free and combined histidine through association with chromophoric dissolved organic matter* | American Chemical Society National Meeting | Boston, MA | August 20, 2015.

13. McConville M. and **Remucal C.K.*** *Balancing the use of pesticides with protecting commercial fisheries: The role of photolysis in the fate of lampricides in the Great Lakes.* | Association of Environmental Engineering and Science Professors Meeting | New Haven, CT | June 16, 2015.
12. Golub M.*, Desai A. R., **Remucal C.K.**, McKinley G. A., and Stanley E. H. | *The effect of random parameter errors on predictability of long-term change in freshwater pCO₂ calculated from thermodynamic equilibria* | Society for Freshwater Science Meeting | Milwaukee, WI | May 2015.
11. Maizel M.*, Kamp W., and **Remucal C.K.** | *Comparing triplet reaction mechanisms for DOM characterization* | American Chemical Society National Meeting | Denver, CO | March 24, 2015.
10. McConville M.* and **Remucal C.K.** | *Characterizing lampricide photoproduct formation under laboratory based and field based conditions* | American Chemical Society National Meeting | Denver, CO | March 22, 2015.
9. McConville M. and **Remucal C.K.*** | *Assessing direct & indirect photochemical pathways impacting fate & transport of lampricides in tributaries of the Great Lakes* | Emerging Contaminants (EmCon) | Iowa City, IA | August 20, 2014.
8. Golub M.*, Desai A.R., McKinley G.A., **Remucal C.K.**, Stanley E.H. | *Random measurement uncertainties effect on CO₂ emissions from north temperate lakes.* | Joint Aquatic Sciences Meeting | Portland, OR | May 2014.
7. McConville M.* and **Remucal C.K.** *Assessing the role of natural organic matter in the photochemical degradation of lampricides.* | American Chemical Society National Meeting | Indianapolis, IN | September 12, 2013.
6. McConville M. and **Remucal C.K.*** *Photochemical degradation of lampricides in the presence and absence of dissolved organic matter.* | Association of Environmental Engineering and Science Professors Meeting | Golden, CO | July 16, 2013.
5. McConville M. and **Remucal C.K.*** *UV photolysis of lampricides in the presence and absence of dissolved organic matter.* | American Chemical Society National Meeting | New Orleans, LA | April 9, 2013.
4. **Remucal C.K.***, Cory R.M., Sander, S. and McNeill K. *Low molecular weight components in an aquatic humic substance as characterized by membrane dialysis and Orbitrap mass spectrometry.* | American Chemical Society National Meeting | New Orleans, LA | April 9, 2013.
3. **Remucal C. K.*** and McNeill K. *Enhancement of visible-light solar water disinfection with riboflavin and its derivatives.* | American Chemical Society National Meeting | Anaheim, CA | March 29, 2011.
2. **Keenan C.R.*** and Sedlak D.L. *Factors affecting the yield of oxidants from the reaction of nanoparticulate zero-valent iron and oxygen.* | American Chemical Society National Meeting | Philadelphia, PA | August 19, 2008.
1. **Keenan C.R.***, Duesterberg C., Waite T.D. and Sedlak D.L. *Hydroxyl radical production by the reaction of zero-valent iron and oxygen.* | American Chemical Society National Meeting | Chicago, IL | March 24, 2007.

Conference Poster Presentations

73. Good S.A.*, Milani A., and **Remucal C.K.** | *Analysis of per- and polyfluoroalkyl substances (PFAS) in wet deposition to Lake Superior* | Freshwater@UW Symposium | Madison, WI | August 1, 2024.
72. Wei H.* and **Remucal C.K.** | *Surface-enhanced Raman spectroscopic analysis of PFAS in firefighting formulations* | SERDP PFAS Project Meeting | Long Beach, CA | July 24, 2024.
71. Gruber K.*, Bieber S.L., Pronschinske M.A., Corsi S.R., Elliot S.M., Shafer M.M., and **Remucal C.K.**, | *PFAS partitioning and loading in tributaries to Lake Superior* | Gordon Research Conference Environmental Sciences: Water | Holderness, NH | June 24, 2024.
70. Knellwolf C.*, Chesley A., Andrade J.B., Arnold W., **Remucal C.K.**, and Wammer K. | *Photodegradation of antibiotics and parameters for environmental relevance* | American Chemical Society National Meeting | New Orleans, LA | March 18, 2024.
69. Wei H.*, Cho S.W., and **Remucal C.K.** | *Surface-enhanced Raman spectroscopic analysis of PFAS in firefighting foam formulations* | SERDP/ESTCP/OE-I Symposium | Arlington, VA | November 29, 2023.

68. Pronschinske M.A.*, Corsi S.R., Elliot S.M., Shafer M.M., Gruber K.D., and **Remucal C.K.** | *Evaluating the prevalence of per- and polyfluoroalkyl substances in Lake Superior tributaries and estimating potential bioeffects using risk-based screening techniques* | SETAC North America 44th Annual Meeting | Louisville, KY | November 15, 2023.
67. Milani A.M.*, Kostelnik E.G., Swenson J.T., Angell L.D., Gruber K.J., and **Remucal C.K.** | *Aquatic Chemistry at UW-Madison: Fate and transformation of organic contaminants* | Women in Science and Engineering (WISE) Poster Session | Madison, WI | November 14, 2023.
66. Kostelnik E.G.*, Swenson J.T., Angell L.D., Gruber K.J., Milani A.M., and **Remucal C.K.** | *Aquatic Chemistry at UW-Madison: Fate and transformation of organic contaminants* | Water@UW Fall Poster Session | Madison, WI | November 7, 2023.
65. Richmond T.*, Kostelnik E., and **Remucal C.K.** | *Effect of molecular probe concentrations on the quantification of photochemically produced reactive intermediates* | MMSD High School Science Research Internship Program Poster Session | Madison, WI | September 26, 2023.
64. Cichy S.M.*, Swenson J., Ginder-Vogel M., and **Remucal C.K.** | *Effects of methanol on phenolic contaminant oxidation with acid birnessite* | Freshwater@UW REU Poster Session | Madison, WI | August 3, 2023.
63. Larson C.*, Knellwolf C., Milstead R., Berg S.M., **Remucal C.K.**, and Wammer K.H. | *Role of dissolved organic matter in the photolysis of environmental contaminants* | American Chemical Society National Meeting | Indianapolis, IN | March 27, 2023.
62. Wagner L.E.*, Angell L.D., Ward A.S., and **Remucal C.K.** | *Environmental fate of 3-trifluoromethyl-4-nitrophenol (TFM), aquatic pesticide used to treat the invasive sea lamprey* | Water@UW Poster Session | Madison, WI | August 4, 2022.
61. Forbes S.*, Cho S.W., **Remucal C.K.**, and Wei H. | *Identifying per- and polyfluoroalkyl substances (PFAS) with Raman spectroscopy* | Water@UW Poster Session | Madison, WI | August 4, 2022.
60. **Remucal C.K.***, White A., Van Frost S., Magness A., and McMahon K.D. | *Aquatic herbicides as a tool to link lab transformation studies to environmental fate* | Gordon Research Conference Environmental Sciences: Water | Holderness, NH | June 20, 2022.
59. Milstead R.P.*, Horvath E., and **Remucal C.K.** | *Dissolved organic matter composition influences its susceptibility to complete and partial photooxidation within lakes* | Gordon Research Conference Environmental Sciences: Water | Holderness, NH | June 20, 2022.
58. Swenson J.*, **Remucal C.K.**, and Ginder-Vogel M. | *Influence of diverse dissolved organic matter on the oxidation of phenolic contaminants by acid birnessite* | Gordon Research Conference Environmental Sciences: Water | Holderness, NH | June 20, 2022.
57. Kelly I.M.*, Beer K.E., Risch A.B., Clausen S.L., Berg S.M., **Remucal C.K.**, and Wammer K.H. | *Influence of dissolved organic matter composition and photochemically-produced reactive intermediates on contaminant photodegradation rates* | American Chemical Society National Meeting | San Diego, CA | March 21, 2022.
56. Magness A.M., White A.M., McMahon K.D., and **Remucal, C.K.** | *Microbial degradation of aquatic herbicides used for invasive plant control* | SETAC North America Annual Meeting | Virtual Conference | November 16, 2021.
55. Bulson E., **Remucal, C.K.**, and Hicks A. | *Toward improved understanding of environmental impacts of per- and polyfluoroalkyl substances in recycling streams* | SETAC North America Annual Meeting | Virtual Conference | November 15, 2021.
54. Berg S.M., Wammer K.H., and **Remucal, C.K.** | *Influence of dissolved organic matter composition and electron-donating capacity on the photochemical formation of reactive intermediates in diverse waters* | Gordon Research Conference Environmental Sciences: Water | Holderness, NH | June 28, 2020.‡
53. **Remucal C.K.** and Bulman D.M. | *Impact of halogen radicals on dissolved organic matter transformation during chlorine photolysis* | Gordon Research Conference Environmental Sciences: Water | Holderness | NH, June 28, 2020.‡
52. Maul M., Mooney R., Berg S.M., **Remucal C.K.**, McIntyre P., and Tiegs S.D. | *Carbon quality, quantity and processing trends in 71 Lake Michigan Tributaries* | Society for Freshwater Science National Meeting | Madison, WI | June 9, 2020. (virtual)

51. Cole R.B., Hawkes J.A., D'Andrilli J., Sleighter R.L., Chen H., Hatcher P.G., Ijaz A., Khaksari M., Schum S., Mazzoleni L., Chu R., Tolic N., Kew W., Hess N., Lv J., Zhang S., He C., Shi Q., Hutchins R.H.S., Lozano D.C.P., Gavard R., Jones H.E., Thomas M.J., Barrow M.P., Osterholz H., Dittmar T., Simon C., Gleixner G., Berg S.M., **Remucal C.K.**, Catalán N., Noriega-Ortega B., Singer G., Radoman N., Schmitt N.D., Stubbins A., Agar J.N., Zito P., and Podgorski D.C | An international laboratory comparison of dissolved organic matter composition by high resolution mass spectrometry: Are we getting the same answer? | American Society for Mass Spectrometry Conference | Houston, TX | June 4, 2020. (virtual)
50. Staehly S.P., Berg S.M., and **Remucal C.K.** | *Dissolved organic matter composition and concentration controls efficiency of photochemically produced reactive intermediate in surface waters* | Virtual Chemistry Undergraduate Poster Symposium | Madison, WI | April 23, 2020. (virtual)
49. Herrli J., Winkels R., Beer K.E., Risch A.B., Berg S.M., **Remucal C.K.**, and Wammer K.H. | *Linking dissolved organic matter composition to photolysis of contaminants* | American Chemical Society National Meeting | Philadelphia, PA | March 23, 2020.‡
48. Balگوoyen S., Bulman D.M., Trainer E.L., Berg S.M., Milstead R., White A., Helgemoe B., and **Remucal C.K.** | *Aquatic Chemistry at UW-Madison: Fate and transformation of organic contaminants* | American Institute of Professional Geologists Wisconsin PFAS Symposium | Madison, WI | February 27, 2020.
47. White A., McMahon K., and **Remucal C.K.** | *Lab and field-based determination of microbial and photodegradation rates of 2,4-dichlorophenoxyacetic acid* | SETAC North America | Toronto, Canada | November 4, 2019.
46. Herrli J.A., Whiting Q.T., Winkels R.I., Berg S.M., **Remucal C.K.**, and Wammer K.H. | *Contaminant transformation in the St. Louis River: The role of indirect photolysis* | AEESP Poster Session in Honor of Diane McKnight | Minneapolis, MN | November 1, 2019.
45. White A., McMahon K., and **Remucal C.K.** | *The role of sunlight and microbes in the degradation of 2,4-dichlorophenoxyacetic acid* | AEESP Emerging Contaminants Short Course | Milwaukee, WI | October 23, 2019.
44. Trainer E.L., Ginder-Vogel M., and **Remucal C.K.** | *Reactivity of phenolic compounds with synthetic and reclaimed manganese oxides determined by organic and solid phase structural properties* | AEESP Emerging Contaminants Short Course | Milwaukee, WI | October 23, 2019.
43. Manley D.M. and **Remucal C.K.** | *Dissolved organic matter transformation and halogenated product formation during chlorine photolysis* | AEESP Emerging Contaminants Short Course | Milwaukee, WI | October 23, 2019.
42. Milstead R. and **Remucal C.K.** | *Identifying disinfection byproducts in groundwater using ultrahigh-resolution mass spectrometry* | North American Mass Spectrometry Summer School | Madison, WI | July 23, 2019.
41. Berg S.M., Whiting Q.T., Herrli J.A., Breuckman K.C., Wammer, K.H., and **Remucal C.K.** | *The impact of dissolved organic matter on the photodegradation of atorvastatin, carbamazepine, DEET, and venlafaxine in the St. Louis River Estuary* | AEESP Distinguished Lecture Series Poster Session | Madison, WI | April 24, 2019.
40. White A., **Remucal C.K.**, and McMahon K. | *The role of sunlight and microbes in the degradation of a common herbicide* | AEESP Distinguished Lecture Series Poster Session | Madison, WI | April 24, 2019.
39. White A., **Remucal C.K.**, and McMahon K. | *The role of sunlight and microbes in the degradation of a common herbicide* | Wisconsin Lakes Association Annual Convention | Stevens Point, WI | April 11, 2019.
38. Herrli J.A., Whiting Q.T., Winkels R.I., Berg S.M., **Remucal C.K.**, and Wammer, K.H. | *Contaminant transformation in the St. Louis River: The role of indirect photolysis* | American Chemical Society National Meeting | Orlando, FL | March 31, 2019.
37. White A., **Remucal C.K.**, and McMahon K. | *The role of sunlight and microbes in the degradation of a common herbicide* | Midwest SETAC Annual Meeting | La Crosse, WI | March 22, 2019.
36. Balگوoyen S., **Remucal C.K.**, and Ginder-Vogel M. | *Organic contaminant degradation by manganese oxides* | American Water Resources Association Wisconsin Section Annual Meeting | Delavan, WI | February 28, 2019.

35. Berg S.M., Whiting Q.T., Herrli J.A., Breuckman K.C., Wammer, K.H., and **Remucal C.K.** | *The impact of dissolved organic matter on the photodegradation of atorvastatin, carbamazepine, DEET, and venlafaxine in the St. Louis River Estuary* | National Estuarine Research Reserve Association National Meeting | Duluth, MN | November 6, 2018.
34. Balgooyen S., Campagnola G., **Remucal C.K.**, and Ginder-Vogel M. | *Impact of bisphenol A influent concentration and reaction time on MnO₂ transformation in a stirred flow reactor* | AEESP Emerging Contaminants Short Course | Milwaukee, WI | October 23, 2018.
33. Berg S.M., Whiting Q.T., Herrli J.A., Breuckman K.C., Wammer, K.H., and **Remucal C.K.** | *The impact of dissolved organic matter on the photodegradation of atorvastatin, carbamazepine, DEET, and venlafaxine in the St. Louis River Estuary* | AEESP Emerging Contaminants Short Course | Milwaukee, WI | October 23, 2018.
32. Trainer E.L., Bulman D.M., Balgooyen S., Berg S.M., Milstead R.P., White A.M., and **Remucal C.K.** | *Degradation of organic contaminants in natural and engineered aquatic systems* | AEESP Emerging Contaminants Short Course | Milwaukee, WI | October 23, 2018.
31. Bulman D.M., Balgooyen S., Trainer E.L., Berg S.M., Milstead R.P., White A.M., and **Remucal C.K.** | *Degradation of organic contaminants in natural and engineered aquatic systems* | Water@UW Fall Poster Session | Madison, WI | October 16, 2018.
30. Berg S. and **Remucal C.K.** | *Fourier transform-ion cyclotron resonance mass spectrometry to characterize dissolved organic matter and describe observed photoreactivity at the molecular level* | North American Mass Spectrometry Summer School | Madison, WI | August 8, 2018.
29. Bulman D. M. and **Remucal C.K.** | *The effect of solution and irradiation conditions on the production of reactive oxidants during chlorine photolysis* | Gordon Research Conference on Environmental Sciences: Water | Holderness, NH | June 26, 2018.
28. Campagnola G., Balgooyen S., Ginder-Vogel M., and **Remucal C.K.** | *Transformation of MnO₂ during oxidation of bisphenol A* | UW-Madison Undergraduate Research Symposium | Madison, WI | April 13, 2018.
27. Manley D. and **Remucal C.K.** | *Effect of solution conditions on reactive oxidant production during chlorine photolysis* | AEESP Distinguished Lecture Series Poster Session | Madison, WI | April 4, 2018.
26. Balgooyen S., Campagnola G., Ginder-Vogel M., and **Remucal C.K.** | *Mechanism and products of bisphenol A oxidation by manganese oxide* | AEESP Distinguished Lecture Series Poster Session | Madison, WI | April 4, 2018.
25. Balgooyen S., Campagnola G., Ginder-Vogel M., and **Remucal C.K.** | *Mechanism and products of bisphenol A oxidation by manganese oxide* | SETAC Young Environmental Scientists Meeting | Madison, WI | March 27, 2018.
24. Whiting Q.T., Herrli J.A., Berg S., **Remucal C.K.**, and Wammer K.H. | *Investigation of the impacts of indirect photolysis on select contaminants along the St. Louis River* | American Chemical Society National Meeting | New Orleans, LA | March 19, 2018.
23. Manley D. and **Remucal C.K.** | *Effect of solution conditions on reactive oxidant production during chlorine photolysis* | Water@UW-Madison Poster Session | Madison, WI | October 24, 2017.
22. Regan C., Leverich E., Ginder-Vogel M., and **Remucal C.K.** | *Oxidation of phenolic compounds by iron-containing manganese oxides* | University of Wisconsin SURE-REU Poster Session | Madison, WI | August 2, 2017.
21. **Remucal C.K.** and Manley D. | *Effect of solution conditions on reactive oxidant production during chlorine photolysis* | Association of Environmental Engineering and Science Professors Meeting | Ann Arbor, MI | June 21, 2017.
20. Hixson J.L., Ward A.S., Schmadel N.M., McConville M., and **Remucal C.K.** | *Interaction of physical and chemical processes controlling the environmental fate and transport of lampricides through stream-hyporheic systems* | American Geophysical Union National Meeting | San Francisco, CA | December 14, 2016.
19. Balgooyen S., Alaimo P.J., **Remucal C.K.**, and Ginder-Vogel M. | *Transformation of manganese oxides during bisphenol A oxidation* | Water@UW-Madison Poster Session | Oct. 28, 2016.

18. McConville M., Hubert T., Ward A., and **Remucal C.K.** *Photochemical fate of lampricides in tributaries of the Great Lakes* | Water@UW-Madison Poster Session | Oct. 28, 2016.
17. Maizel A. and **Remucal C.K.** *Photochemistry of size-fractionated dissolved organic matter* | Water@UW-Madison Poster Session | Oct. 28, 2016.
16. **Remucal C.K.**, Balگوoyen S., Alaimo P.J., and Ginder-Vogel M. *Transformation of manganese oxides during bisphenol A oxidation* | Gordon Research Conference on Environmental Sciences: Water | Holderness, NH | June 29, 2016.
15. McConville M., Hubert T., Ward A., and **Remucal C.K.** *Photochemical fate of lampricides in tributaries of the Great Lakes* | Gordon Research Conference on Environmental Sciences: Water | Holderness, NH | June 28, 2016.
*This poster received the "Best Student Poster Presentation Award" at the GRC.
14. Maizel A. and **Remucal C.K.** *Photochemistry of size-fractionated dissolved organic matter* | Gordon Research Conference on Environmental Sciences: Water | Holderness, NH | June 27, 2016.
13. Chu C., Lundeen R. A., **Remucal C. K.**, Sander M., and McNeill K. | *Enhanced indirect photochemistry of dissolved free and combined histidine through association with chromophoric dissolved organic matter* | Gordon Research Conference on Environmental Sciences: Water | Holderness, NH | June 27, 2016.
12. **Remucal C.K.**, McConville M. and Ward A. *Evidence of lampricide photodegradation during field applications to tributaries of the Great Lakes* | American Chemical Society National Conference | San Diego, CA | March 16, 2016.
11. McConville M., Ward A. and **Remucal C.K.** *Evidence of lampricide photodegradation during field applications to tributaries of the Great Lakes* | Midwest Regional SETAC Chapter Meeting | Madison, WI | March 15, 2016.
10. Maizel A., Kamp W. and **Remucal C.K.** *Photochemical production of reactive species by low molecular weight components of Suwannee River fulvic acid* | Gordon Research Conference on Environmental Sciences: Water | Holderness, NH | June 24, 2014.
9. Linde L., McConville M. and **Remucal C.K.** *Indirect photodegradation of lampricides.* | University of Wisconsin-Madison Undergraduate Research Symposium | Madison, WI | May 16, 2014.
8. Chhouk B., Mejia J., Ginder-Vogel M. and **Remucal C.K.** *Kinetics of bisphenol A and 17 β -estradiol oxidation by manganese(IV) oxides.* | SACNAS National Conference | San Antonio, TX | October 5, 2013.
7. Linde L., McConville M. and **Remucal C.K.** *Photodegradation dependence of 3-trifluoro4-nitrophenol and 5-chloro-N-(2-chloro-4-nitrophenyl)-2-hydroxybenzamide on pH.* | WI Earth and Water Student Conference | Whitewater, WI | September 20, 2013.
6. **Remucal C. K.**, Cory R. M., Sander M. and McNeill K. *Low molecular weight components in an aquatic humic substance as characterized by membrane dialysis and Orbitrap mass spectrometry.* | Gordon Research Conference on Environmental Sciences: Water | Holderness, NH | June 27, 2012.
5. **Remucal C. K.** and McNeill K. *Enhancement of visible light solar water disinfection with riboflavin and its derivatives.* | Gordon Research Conference on Environmental Sciences: Water | Holderness, NH | June 22, 2010.
4. **Keenan C.R.** and Sedlak D.L. *Ligand-enhanced reactive oxidant generation by nanoparticulate zero-valent iron and oxygen.* | Gordon Research Conference on Environmental Sciences: Water | Holderness, NH | June 24, 2008.
3. **Keenan C.R.**, Lee C. and Sedlak D.L. *Generation of oxidants from the reaction of nanoparticulate zero-valent iron for the use in contaminant remediation.* | American Geophysical Union National Meeting | San Francisco, CA | December 11, 2007.
2. **Keenan C.R.**, Duesterberg C.K., Waite T.D. and Sedlak D.L. *Use of oxidants produced by nanoparticulate zero-valent iron in contaminant remediation.* | Superfund Basic Research Program Annual Meeting | San Diego, CA | December 11-12, 2006.
1. **Keenan C.R.** and Sedlak D.L. *Contaminant oxidation by zero-valent iron nanoparticles.* | Gordon Research Conference on Environmental Sciences: Water | Holderness, NH | June 28, 2006.

CONFERENCES ATTENDED

Professional Conferences Attended

Sea Grant Week, Savannah, GA	Aug. 2024
Gordon Research Conference on Environmental Sciences: Water, Holderness, NH (chair)	June 2024
Sea Grant Association Annual Meeting, Washington, DC	March 2024
Gordon Research Conference on Water Disinfection, South Hadley, MA	Aug. 2023
AEESP Meeting, Boston, MA	June 2023
ACS National Meeting, Indianapolis, IN	Mar. 2023
Gordon Research Conference on Environmental Sciences: Water, Holderness, NH	June 2022
Workshop on Next Generation Humic Isolates, Portsmouth, NH (hybrid)	June 2022
ACS National Meeting, San Diego, CA	Mar. 2022
Great Lakes PFAS Summit, Lansing MI (virtual)	Dec. 2021
FLUOROS, Providence, RI (virtual)	Oct. 2021
EmCon, Seattle, WA (virtual)	Sept. 2021
Setting a Research Agenda for PFAS in Wisconsin, Madison, WI (virtual)	July 2021
AEESP Meeting Virtual Appetizer, St. Louis, MO (virtual)	July 2021
Wisconsin American Water Works Association, Madison, WI (virtual)	Sept. 2020
Environmental Health in Wisconsin, Madison, WI	March 2020
Gordon Research Conference on Environmental Sciences: Water, Holderness, NH	June 2018
LTER Science Council, Madison, WI	May 2018
Society of Freshwater Sciences, Detroit, MI	May 2018
ACS National Meeting, New Orleans, LA	Mar. 2018
AEESP Meeting, Ann Arbor, MI	June 2017
ACS National Meeting, San Francisco, CA	Mar. 2017
Gordon Research Conference on Environmental Sciences: Water, Holderness, NH	June 2016
ACS National Meeting, San Diego, CA	Mar. 2016
AEESP Meeting, New Haven, CT	June 2015
ACS National Meeting, Denver, CO	Mar. 2015
EmCon, Iowa City IA	Aug. 2014
AEESP Meeting, Golden, CO	July 2013
ACS National Meeting, New Orleans, LA	April 2013
Gordon Research Conference on Environmental Sciences: Water, Holderness, NH	June 2012
ACS National Meeting, Anaheim, CA	Mar. 2011
Gordon Research Conference on Environmental Sciences: Water, Holderness, NH	June 2010
ACS National Meeting, Philadelphia, PA	Aug. 2008
Gordon Research Conference on Environmental Sciences: Water, Holderness, NH	June 2008
AGU National Meeting, San Francisco, CA	Dec. 2007
ACS National Meeting, Chicago, IL	Mar. 2007
Superfund Basic Research Program Annual Meeting, San Diego, CA	Dec. 2006
Gordon Research Conference on Environmental Sciences: Water, Holderness, NH	June 2006

EXTERNAL PROFESSIONAL SERVICE

Grant Proposal Reviewer

National Science Foundation; National Institutes for Water Resource & U. S. Geological Survey; Innovational Research Incentives Scheme Veni; Natural Sciences and Engineering Research Council of Canada; Innovation and Technology Commission Hong Kong Special Admin. Region; UW-Madison 2020 Competition; UW-Madison Research Forward Initiative; Iowa Water Center.

External Review

Promotion and Tenure Review: 5 total	2018-present
California Sea Grant Site Review Panelist	2024

Manuscript Reviewer

2009–present

ACS Au; Biogeochemistry; Chemical Engineering Journal; Chemosphere; Environmental Engineering Science; Environmental Science & Technology; Environmental Science & Technology Letters; Environmental Sciences: Process & Impacts; Environmental Science: Water Research & Technology; Frontiers of Environmental Science & Engineering; Journal of Agricultural and Food Chemistry; Organic Geochemistry; Pedosphere; Science of the Total Environment; Water Research

Conference Organizer

Poster Chair, Gordon Research Conference on Environmental Sciences: Water June 2012
 Session co-chair with Michael Sander and Christopher Gorski. Session: Environmental Redox and Reactive Oxygen Species Chemistry. Goldschmidt, Prague, Czech Republic August 2015
 Session Leader, Water@UW-Madison Symposium May 2017
 Session Moderator. Session: Fate and Presence of Environmental Contaminants in Communities. AEESP Conference, Ann Arbor, MI. June 2017
 Planning Committee Member. Setting a Research Agenda for PFAS in Wisconsin Workshop, Madison, WI July 2021
 Chair, Gordon Research Conference on Environmental Sciences: Water June 2024

Service to Professional Societies

Liaison between the Association of Environmental Engineering and Science Professors (AEESP) and the Gordon Research Conferences 2017 – present

Public Service

Freshwater Collaborative of Wisconsin Steering Committee 2024 – present
 Wisconsin Groundwater Coordinating Council 2023 – present
 UW System Representative on the Wisconsin PFAS Action Council (WisPAC) 2019 – present
 DNR emerging contaminants research scientist search committee 2020

INTERNAL PROFESSIONAL SERVICE**Campus Service**

Mentor committee for Geosciences Assistant Professor Athena Ngheim 2024-present
 Molecular and Environmental Toxicology program executive committee 2021
 Mentor committee for Nelson Institute Assistant Professor Grace Bulltail 2019-present

College Service

Ragnar Onstad Service to Society Award committee 2024
 New Engineering Building Design (Research and Instructional Facilities) 2022-present
 Future Faculty in Engineering Workshop panelist 2022
 Women Faculty Mentoring Program mentor 2022-2024
 John Brady Memorial Workshop planning committee 2020
 College of Engineering Strategic Planning Committee on Research 2020
 Society of Women Engineers faculty advisor 2013-2022
 College of Engineering Graduate Engineering Research Scholars review committee 2018
 SWE Abroad Application Review Panel 2018, 2019

Departmental Service

CEE Department Chair Selection Committee member 2022-2023
 CEE Graduate Student Services Coordinator search & screen committee member 2022
 ESE Division interim chair 2022
 CEE representative on the College of Engineering Leadership Workshop 2021-2022
 Graduate programs in CEE presentation to UW-Platteville 2021
 B.S. in Environmental Engineering planning committee member 2020-2022
 Mentor committee for CEE Assistant Professor Haoran Wei 2020-present
 Admitted Student Preview Day Academic Experience faculty panel 2020

EC&T Academic Planning committee member	2019-present
CEE Graduate Program Chair and Operations Committee member	2019-2023
Environmental Engineering M.Eng. executive committee member	2019-2023
Mentor committee for CEE Assistant Professor Bu Wang	2018-2023
Mentor committee for CEE Assistant Professor Hannah Blum	2018-2023
WSEL laboratory manager search & screen committee chair	2018
EC&T Academic Planning committee chair	2017-2018
CEE accountant search & screen committee member	2017
Byron Bird Award for Excellence in a Research Publication selection committee	2017
CEE search & screen committee member (CEM search)	2016, 2017
Water@UW-Madison ad hoc committee member	2016-2017
EC&T Academic Planning committee member	2015-2017
CEE search & screen committee member (CEM search)	2015-2016
Robyn Ryan Scholarship Award committee member UW Madison	2015, 2019, 2020, 2021
EC&T safety committee	2014-present
CEE qualifying exam organizer	2014
CEE Panelist for Pre-Engineering (EGR) undergraduates	2013
Celebrating Women in Engineering Event CEE representative	2013, 2015
CEE Panelist for the Day on Campus Event hosted by the Society of Women Engineers	2013, 2015
CEE Alternate Senator to Faculty Senate UW Madison	2013-2016
Anna Grant Birge Award committee member UW Madison	2013, 2020
CEE Faculty Search Committee Graduate Student Panel Member UC Berkeley	2008
Environmental Engineering Friday Seminar Series Organizer UC Berkeley	2007

Invited Workshop Presentations

Water@UW Madison Symposium	May 2015
Delta Workshop on CAREER Proposal Education Plans	June 2015
College of Engineering CAREER Workshop Panelist	April 2018

Outreach

Badger Talks Live, PFAS in Wisconsin	Apr. 2023
Iowa Ideas, panel on emerging contaminants	Mar. 2023
Sustain Dane, panel on PFAS community impacts & management	Feb. 2023
Finding Yourself in STEM podcast, Wiscience Biocommons	Apr. 2022
Day at the Capitol, PFAS in Wisconsin	Apr. 2022
Day at the Capitol, <u>PFAS in Waters of Wisconsin</u> (virtual)	Apr. 2021
Science on Tap – PFAS in Wisconsin (virtual)	Oct. 2019
Expanding Your Horizons workshop organizer	Nov. 2013, 2015, 2016, 2017
Women in Science and Engineering program seminar guest	Nov. 2013, 2015, 2016
Half-day: Wisconsin Louis Stokes Alliance for Minority Participation (WiscAMP) Excel program	June 2013
Episode on water purification for Blue Sky Science (partnership of the Morgridge Institute and Wisconsin State Journal). https://morgridge.org/question/how-do-we-purify-dirty-water/	July 2015
Science outreach at Midvale Elementary	May 2017, Dec. 2017
Invited presenter for the Institute for Chemical Education at UW-Madison	June 2017, 2018
Wednesday Nite @ the Lab presenter	2018, 2021, 2023
Wisconsin Public Television: <u>University Place Program</u>	November 2018
Frozen Assets Group Poster	2019, 2020, 2022
Science outreach with Girl Scout Troop 8137	2020

Graduate Student Examination Committee

Masters Defense Committees: 9 total	2013-present
PhD Thesis Background Exams: 1 total	2023-present
PhD Prospectus Exams: 1 total	2023-present
PhD Qualifying Exam Committees: 9 total	2013-present
PhD Preliminary Exam Committees: 27 total	2012-present

PhD Research Proposal Exam Committees: 1 total 2024-present
 PhD Defense Committees: 27 total 2013-present

TEACHING AND MENTORING EXPERIENCE

University of Wisconsin, Madison Courses

CEE 320 | *Introduction to Environmental Engineering* Spring 2014, 2016, 2017, 2021, 2023; Fall 2019
 CEE 322 | *Environmental Engineering Processes* Fall 2017, 2019, 2021, 2022, 2023
 CEE 609-001 | *Current Topics in Environmental Chemistry* Fall 2014, 2020
 CEE 700 | *Chemistry of Natural Waters* Fall 2012, 2013, 2016
 CEE 704 | *Environmental Chemical Kinetics* Fall 2015, Spring 2013, 2018, 2020, 2022
 CEE 909 | *Water Chemistry Seminar* Spring 2015; Fall 2020
 CHEM 964 | *Molecular Dynamics Seminar* Spring 2022

University of Wisconsin, Madison Guest Instructor

CEE 320 | *Introduction to Environmental Engineering* Fall 2013
 CEE 501 | *Water Analysis* Fall 2020
 CEE 631 | *Toxicants in the Environment* Spring 2015, 2016
 ENVST 101 | *Forum on the Environment* Spring 2023, 2024
 MET 606 | *Colloquium in Environmental Toxicology* Spring 2014
 OBGYN 956 | *Responsible Conduct of Research* Spring 2022

Non-University of Wisconsin, Madison Courses

Case Studies in Environment and Health | ETH-Zürich | lecturer Spring 2011
Semester Paper on a Scientific Topic | ETH- Zürich | student mentor Spring 2010
Introduction to Environmental Organic Chemistry | ETH- Zürich | guest lecturer Fall 2010
Environmental Analytical Chemistry | UC Berkeley | guest lecturer Spring 2008
Environmental Chemical Kinetics | UC Berkeley | guest lecturer Spring 2008
Water Chemistry | UC Berkeley | graduate student instructor & guest lecturer Fall 2007

Current Postdoctoral Scholars

Zhao Yang 2024-present
 • Research: PFAS in surface waters

Current Graduate Research Students

Jenna Swenson | PhD | Environmental Chemistry and Technology Program 2020-present
 • Research: Oxidative properties of manganese oxides
 • Co-advised by Dr. Matthew Ginder-Vogel
 • NSF Graduate Research Fellowship Program Award (\$138,000; 2021); Becker Travel Supplement (\$600, 2022), Becker Travel Supplement (\$400, 2023); Becker Travel Supplement (\$200, 2024); Anna Grant Birge Award (\$1,828; 2024).

Kaitlyn Gruber | PhD | Chemistry 2022-present
 • Research: Fingerprinting disperse PFAS sources to groundwater
 • NSF Graduate Research Fellowship Program Award (\$138,000; 2022); Anna Grant Birge Award (\$1,491; 2021); Becker Travel Supplement (\$200; 2024).

Ali Milani | PhD | Environmental Chemistry and Technology Program 2023-present
 • Research: PFAS inputs to Lake Superior
 • Ellis Cowling Travel Award (\$1,050; 2024).

Samantha Summerfield | PhD | Environmental Chemistry and Technology Program 2024-present
 • Research: Photochemistry of DOM

Adriana Agosta | PhD | Environmental Chemistry and Technology Program 2024-present

- Research: Contaminant photochemistry

Current Undergraduate Research Students

Ann McGrath-Flinn Environmental Engineering	Sept. 2023-present
<ul style="list-style-type: none"> • Sophomore Research Fellowship (\$500; 2024) 	
Lily Thatcher Chemistry, Environmental Studies	Jan. 2024-present
Emily Valentine Chemistry, Environmental Sciences	Sept. 2024-present
Ellie Murray Political Science, Chemistry	Sept. 2024-present
Lily Benson Biochemistry, Environmental Studies	Sept. 2024-present

Former Postdoctoral Scholars

Summer Sherman	2022-2023
<ul style="list-style-type: none"> • Research: PFAS in foams and ice 	
Sarah Balgooyen	2019-2022
<ul style="list-style-type: none"> • Research: PFAS in waters of Wisconsin • J. Philip Keillor Water Science Fellow 	

Former Graduate Research Students

Edward Kostelnik MS Environmental Chemistry and Technology Program	2022-2024
<ul style="list-style-type: none"> • Research: DOM photochemistry • Becker Travel Supplement (\$200, 2024). 	
Lauryn Angell MS Environmental Chemistry and Technology Program	2021-2024
<ul style="list-style-type: none"> • Research: Fate of lampricides in tributaries of the Great Lakes • Anna Grant Birge Award (\$1,988; 2022); Becker Travel Supplement (\$600, 2022); Becker Travel Supplement (\$200, 2024). 	
Reid Milstead PhD Environmental Chemistry and Technology Program	2018-2023
<ul style="list-style-type: none"> • Research: Disinfection byproduct formation in groundwater and DOM characterization • Anna Grant Birge Award (\$800; 2021); Becker Travel Supplement (\$600, 2022). 	
Sydney Van Frost MS Civil and Environmental Engineering	2021-2023
<ul style="list-style-type: none"> • Research: Fate of aquatic herbicides in whole lake treatments • Co-advised by Dr. Katherine McMahon • Undergraduate researcher (2019 – 2021). Undergraduate awards: Duane H. Mass Scholarship (\$6,715; 2020); Elizabeth Ebbott Huppler Scholarship (\$5,000; 2020), UW-Madison Undergraduate Scholarship for Summer Study (\$500; 2020); Midwest Aquatic Plant Management Society (\$6,000; 2022); Anna Grant Birge Award (\$1,742; 2022), Becker Travel Supplement (\$400; 2023). 	
Samuel Bieber MS Chemistry	2022-2023
<ul style="list-style-type: none"> • Research: Sources and fate of PFAS in the Great Lakes 	
Amber White Environmental Chemistry and Technology Program	2018-2022
<ul style="list-style-type: none"> • Research: Fate of aquatic herbicides in whole lake treatments • Co-advised by Dr. Katherine McMahon • NSF Graduate Research Fellowship Program Award (\$138,000; 2018); Anna Grant Birge Award (\$2,000; 2019); SETAC Student Travel Award (\$600; 2019); Becker Travel Supplement (\$400; 2019); Becker Travel Supplement (\$250; 2020); EC&T Commitment to JEDI Award (\$250; 2020); Midwest Aquatic Plant Management Society (\$5,000; 2021); Anna Grant Birge Award (\$700; 2021); Legends Research Scholarship Award (\$500; 2021). 	

- Emily Sellers** | MS | Environmental Chemistry and Technology Program 2020-2022
- Research: Fate of PFAS in wastewater treatment
 - Co-advised by Dr. Martin Shafer
- Bobbi Jo Helgemoe** | MS | Environmental Chemistry and Technology Program 2019-2021
- Research: Fate of lampricides in tributaries of the Great Lakes
- Emma Leverich Trainer** | PhD | Environmental Chemistry and Technology Program 2016-2021
- Research: Oxidative properties of manganese oxides
 - Co-advised by Dr. Matthew Ginder-Vogel
 - Graduate School Student Research Travel Grant (\$600; 2019); Becker Travel Supplement (\$400; 2019); EC&T Commitment to JEDI Award (\$250; 2020).
- Stephanie Berg** | PhD | Environmental Chemistry and Technology Program 2016-2021
- Research: Photochemistry of dissolved organic matter in the Saint Louis River Estuary
 - Anna Grant Birge Award (\$1,911; 2017); Best Student Oral Presentation Award (Emerging Contaminants in the Aquatic Environment Conference; 2018); Graduate School Student Research Travel Grant (\$1,200; 2019); Anna Grant Birge Award (\$1,956; 2019); Becker Travel Supplement (\$400; 2019); ACS Graduate Student Awardee in Environmental Chemistry (\$100; 2019).
- Devon Manley Bulman** | PhD | Environmental Chemistry and Technology Program 2015-2020
- Research: Contaminant transformation and disinfection by-product formation during chlorine photolysis
 - NWRI Graduate Fellowship Award (\$10,000; 2016); Environmental Chemistry & Technology Travel Award (\$250; 2018); Graduate School Student Research Travel Grant (\$600; 2019).
- Sarah Balgooyen** | PhD | Environmental Chemistry and Technology Program 2014-2019
- Research: Oxidative properties of manganese oxides
 - Co-advised by Dr. Matthew Ginder-Vogel
 - NSF Graduate Research Fellowship Program Award (\$126,000; 2015); Becker Travel Supplement (\$250; 2016); UW Graduate School Travel Grant (\$600; 2016); Certificate of Merit for the presentation of an oral paper (ACS; Spring 2016); Becker Travel Supplement (\$200; 2018); Environmental Chemistry & Technology Travel Award (\$250; 2018).
- Erin Ostrem Loss** | PhD | Molecular and Environmental Toxicology Program 2013-2018
- Research: Biodegradation of PAHs by fungi
 - Co-advised by Dr. Jae-Hyuk Yu (Bacteriology)
 - EPA STAR Fellowship (\$132,000; 2016).
- Andrew Maizel** | PhD | Civil and Environmental Engineering 2013-2017
- Research: Characterization of dissolved organic matter by dialysis, mass spectrometry and photochemical behavior
 - Becker Travel Supplement (\$200; 2014); Environmental Chemistry & Technology Travel Award (\$300; 2014); Anna Grant Birge Award (\$1,179; 2014); Becker Travel Supplement (\$300; 2015); Becker Travel Supplement (\$250; 2016); UW Graduate School Travel Grant (\$1,200; 2016).
- Megan McConville** | PhD | Environmental Chemistry and Technology Program 2012-2017
- Research: The role of indirect photochemical degradation in the environmental fate of lampricides
 - Anna Grant Birge Award (\$790; 2013); NSF Graduate Research Fellowship Program Award (\$126,000; 2013); Becker Travel Supplement (\$250; 2013); Becker Travel Supplement (\$200; 2014); Environmental Chemistry & Technology Travel Award (\$300; 2014); Becker Travel Supplement (\$300; 2015); Anna Grant Birge Award (\$1,000; 2015); GRC on Environmental Sciences: Water "Best Student Poster Presentation Award" (2016).

Former Undergraduate Research Students

Laura Linde Chemistry, Environmental Studies	Oct. 2012 – Dec. 2014
<ul style="list-style-type: none"> Holstrom Environmental Scholarship (\$4,000; 2013) 	
Billionrosannae Chhouk Environmental Studies San Diego State University	Summer 2013
<ul style="list-style-type: none"> Integrated Biological Sciences Summer Research Program Co-advised by M. Ginder-Vogel 	
William Kamp Chemistry, Environmental Studies	Feb. 2014 – May 2015
Sonia Chandra Chemical Engineering	Jan. 2015 – May 2015
Jing (Juno) Li Civil and Environmental Engineering	Jan. 2015 – May 2016
<ul style="list-style-type: none"> NSF REU fellow (\$5,000; 2015) 	
Taryn Davis Civil & Environmental Engineering	Jan. 2016 – May 2016
Natan Cohen Civil & Environmental Engineering	June 2016 – Dec. 2016
Owen Walcott Chemistry	June 2016 – Aug. 2017
Joseph Brunner Civil & Environmental Engineering	Jan. 2017 – Dec. 2017
Quinn Whiting Chemistry University of St. Thomas	summer 2017
Regan Cadena Chemistry New Mexico State University	summer 2017
<ul style="list-style-type: none"> SURE REU fellow 	
Gabrielle Campagnola Civil and Environmental Engineering	Sept. 2015 – May 2019
Keerthana Sreenivasan Civil and Environmental Engineering	Sept. 2017-May 2018
Ellen Kimlinger Civil Engineering	Jan. 2019-Dec. 2020
Sofia Staehly Chemistry	Sept. 2019-May 2020
Edward Paulsen Chemistry	Sept. 2019-May 2020
Lily Wagner Conservation Biology	Summer 2022
<ul style="list-style-type: none"> Water@UW REU program 	
Alexander Lemmenes Chemistry	Sept. 2021-Summer 2022
Emma Horvath Civil Engineering	Sept. 2021-Dec. 2022
Sofia Mota Cichy Chemistry	Summer 2023
<ul style="list-style-type: none"> Freshwater@UW REU program 	
Josie Jauquet Civil Engineering, Chemistry	Sept. 2021-May 2024
Shyleigh Good Chemistry	Summer 2024
<ul style="list-style-type: none"> Freshwater@UW REU program 	
Emily Schmidt Chemistry	June 2023-June 2024

Former High School Research Students

Talia Richmond West High School	Summer 2023
<ul style="list-style-type: none"> MMSD High School Science Research Internship (HSRI) Program 	

MEMBERSHIPS IN PROFESSIONAL ORGANIZATIONS

American Chemical Society
 Association of Environmental Engineering and Science Professors