Christina Keenan Remucal, Ph.D.

Associate Professor | DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING

University of Wisconsin, Madison | 141 Water Science and Engineering Laboratory | 660 N. Park St., Madison, WI 53706, USA

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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

Associate Professor | Department of Civil and Environmental Engineering; Environmental Chemistry and Technology Program; Limnology and Marine Science Program; Molecular and Environmental Toxicology Center 2018-present

Director | Water Science and Engineering Laboratory 2018-present

Assistant Professor | Department of Civil and Environmental Engineering; Environmental Chemistry and Technology Program; Limnology and Marine Science Program; Molecular and Environmental Toxicology Center 2012-2018

ETH – SWISS FEDERAL INSTITUTE OF TECHNOLOGY | Zürich, Switzerland

Postdoctoral Associate | Institute of Biogeochemistry and Pollutant Dynamics 2009–12

- Prof. Kristopher McNeill research group

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

Ragnar Onstad Service to Society Award 2022
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 *Environmental Science: Water Research and Technology*. 6, 540-553.
Benjamin Smith Reynolds Award for Excellence in Teaching 2020
ES&T and *ES&T Letters* Young Investigator 2019
Environmental Science: Processes & Impacts 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. *Environ. Sci. Processes Impacts*. 21, 19-27.
Environmental Science and Technology Letters 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. *Environ. Sci. Processes Impacts.* 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. *Environ. Sci. Processes Impacts.* 19, 891 – 900.
Environmental Science and Technology Excellence in Review Award 2016
Environmental Sciences: Processes and Impacts 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. *Environ. Sci. Process. Impacts.* 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

46. Hixson J., Ward A., McConville M., and **Remucal C.K**. Release timing and duration control the fate of photolytic compounds in stream-hyporheic systems. (2022) *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.
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.
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 Ti_4O_7 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 CK**, 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? *Limnology and Oceanography: 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 *Environmental Science: Water Research and Technology*. 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., Herrli 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. *Environmental Science and Technology,* 53, 20, 11725-11734.
27. **Remucal C.K.** (2019) Spatial and temporal variability of perfluoroalkyl substances in the Laurentian Great Lakes, *Environmental Science: Processes and 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 MnO_2 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 H_2O_2 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 pCO_2 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 MnO_2 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. Tech. 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. Process. 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 CK.**., 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.

RESEARCH GRANTS AND FUNDING

Extramural Research Grants Funded (total at University of Wisconsin, Madison = $6,791,715**)

27. Midwest Aquatic Plant Management Society | 2022 $6,000
Characterizing the fate and transport of florpyrauxifen, the primary degradation product of emerging aquatic herbicide florpyrauxifen-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*
LTER: 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 = $841,796)

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 | 2020 $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

PRESENTATIONS

Invited Research Seminars

	Location	Department	Seminar Date
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	Wednesday Nite @ the Lab	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

‡ Canceled due to COVID-19

Invited Webinars

	Topic	Organization	Webinar Date
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

Conference Presentations

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

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 presentation*
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 Balgooyen 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-trifuluoromethyl-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. Balgooyen, 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. Balgooyen 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., Herrli 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., McIntryre 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., McIntryre 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 oral presentation
37. Berg S.*, 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* | 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., Herrli 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 McIntrye 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. Balgooyen S.*, **Remucal C.K.**, and Ginder-Vogel M. | *Mineralogical transformation of MnO_2 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. Balgooyen 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.*, Balgooyen 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. Balgooyen S.*, Chhouk B., Ginder-Vogel M., and **Remucal C.K.** | *Oxidative transformation of bisphenol A in the presence of synthetic δ-MnO_2* | 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. Balgooyen S.*, Chhouk B., Ginder-Vogel M., and **Remucal C.K.** | *Mineral surface modification of δ-MnO_2 decreases bisphenol A oxidation rate* | Soil Science Society of America | Minneapolis, MN | November 17, 2015.
16. Ginder-Vogel M.*, Balgooyen 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 pCO_2 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 CO_2 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 spectromety.* | 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

62. Wagner L.E.*, Angell L.D., Ward A.S., and **Remucal C.K.** | *Environmental fate of 3-trifluoromethyl-4-nitrphenol (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 rants 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 CK**, 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. Balgooyen 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. Balgooyen 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 MnO_2 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 MnO_2 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.**, Balgooyen 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 17β-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

Gordon Research Conference on Environmental Sciences: Water, Holderness, NH	June 2022
Workshop on Next Generation Humic Isolates, hybrid and Portsmouth, NH	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

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 & Enginering; 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

Poster Judge, AEESP Conference July 2013

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

Service to Journals

Environmental Science: Processes and Impacts, Advisory Board Member 2019 – present

Public Service

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

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

College Service

Future Faculty in Engineering Workshop panelist 2022
Women Faculty Mentoring Program mentor 2022 - present
John Brady Memorial Workshop planning committee 2020
College of Engineering Strategic Planning Committee on Research 2020
Society of Women Engineers faculty advisor 2013-present
College of Engineering Graduate Engineering Research Scholars review committee 2018
SWE Abroad Application Review Panel 2018, 2019

Departmental Service

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-present
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-present
Environmental Engineering M.Eng. executive committee member	2019-present
Mentor committee for CEE Assistant Professor Bu Wang	2018-present
Mentor committee for CEE Assistant Professor Hannah Blum	2018-present
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 "Developing an Excellent Education Plan for your CAREER Proposal: Ideas and Advice from Successful CAREER Awardees"	June 2015
College of Engineering CAREER Workshop Panelist	April 2018

Outreach

Finding Yourself in STEM podcast, Wiscience Biocommons	Apr. 2022
Day at the Capitol, PFAS in Wisconsin	Apr. 2022
Day at the Capitol, PFAS in Waters of Wisconsin (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	April 2018, Sept. 2021
Wisconsin Public Television: University Place Program	November 2018
Frozen Assets Group Poster	2019, 2020, 2022
Science outreach with Girl Scout Troop 8137	2020

Graduate Student Examination Committee

Masters Defense Committees: 5 total	2013-present
PhD Qualifying Exam Committees: 9 total	2013-present
PhD Preliminary Exam Committees: 21 total	2012-present
PhD Defense Committees: 22 total	2013-present

TEACHING AND MENTORING EXPERIENCE

University of Wisconsin, Madison Courses

CEE 320 | *Introduction to Environmental Engineering*	Spring 2014, 2016, 2017, 2021; Fall 2019
CEE 322 | *Environmental Engineering Processes*	Fall 2017, 2019, 2021, 2022
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
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

Summer Sherman 2022-present
- Research: PFAS in waters of Wisconsin

Current Graduate Research Students

Reid Milstead | Environmental Chemistry and Technology Program 2018-present
- Research: Disinfection byproduct formation in groundwater
- Anna Grant Birge Award ($800; 2021); Becker Travel Supplement ($600, 2022).

Jenna Swenson | 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).

Lauryn Angell | Environmental Chemistry and Technology Program 2021-present
- Research: Fate of lampricides in tributaries of the Great Lakes
- Anna Grant Birge Award ($1,988; 2022).

Sydney Van Frost | Civil and Environmental Engineering 2021-present
- 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).

Samuel Bieber | Chemistry 2022-present
- Research: Sources and fate of PFAS in the Great Lakes

Kaitlyn Gruber | Chemistry 2022-present
- Research: Fingerprinting disperse PFAS sources to groundwater

Edward Kostelnik | Environmental Chemistry and Technology Program 2022-present
- Research: DOM photochemistry

Current Undergraduate Research Students

Emma Horvath | Civil Engineering Sept. 2021-present
- Research: Dissolved organic matter photochemistry

Former Postdoctoral Scholars

Sarah Balgooyen 2019-2022
- Research: PFAS in waters of Wisconsin
- J. Philip Keillor Water Science Fellow

Former Graduate Research Students

UNIVERSITY OF WISCONSIN, MADISON | Madison WI

Amber White | Environmental Chemistry and Technology Program 2018-2022
- 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

UNIVERSITY OF WISCONSIN, MADISON | Madison WI

Laura Linde | Chemistry, Environmental Studies Oct. 2012 – Dec. 2014

- Chem 346 Research Project: Photochemical degradation of trifluoromethylphenol
- Holstrom Environmental Scholarship ($4,000; 2013)

Billionrosannae Chhouk | Environmental Studies | San Diego State University Summer 2013

- 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

- 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 • SURE REU fellow	summer 2017
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 • Water@UW REU program	Summer 2022
Josie Jauquet | Civil Engineering, Chemistry	Sept. 2021-Summer 2022
Alexander Lemmenes | Chemistry	Sept. 2021-Summer 2022

MEMBERSHIPS IN PROFESSIONAL ORGANIZATIONS

American Chemical Society
Association of Environmental Engineering and Science Professors
Society of Freshwater Science
Society of Women Engineers