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Engineering & Scientific Consulting

Shannon Owings, Ph.D.

Managing Scientist | Chemical Regulation and Food Safety
Washington DC
+1-202-772-4964 | sowings@exponent.com

Professional Profile

Dr. Owings has an interdisciplinary background in biogeochemistry focusing on sediment chemical cycling, working on both laboratory and field-based studies. At Exponent, she specializes in federal registration of pesticide products and state registrations of pesticides, soil amendments, and fertilizers.

Dr. Owings handles projects related to the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) including preparing registration packages for new products and corresponding with the EPA and state agencies on behalf of existing registrations. Dr. Owings has experience managing submissions for antimicrobials, biochemicals and emerging biotechnologies. Additionally, Dr. Owings has growing expertise in the Toxic Substance Control Act (TSCA), providing clients with guidance on regulatory compliance.

Academic Credentials & Professional Honors

Ph.D., Earth and Atmospheric Sciences, Georgia Institute of Technology, 2020

B.S., Chemistry, University of Delaware, 2013

Prior Experience

Chateaubriand STEM Fellow, Laboratoire des Sciences du Climat et de l'Environnement (LSCE), France, 2018-2019

Professional Affiliations

American Chemical Society

Household and Commercial Products Association

Publications

Owings, S., Eitel, E., Bréthous, L., Eitel, E. M., Fields B.P., Boever, A., Beckler, J., Bombled, B., Lansard, B., Metzger, E.,Rabouille, C., and Taillefert, M. Differential manganese and iron recycling and transport in continental margin sediments of the Northern Gulf of Mexico, Marine Chemistry. 2021, 229:103908 https://doi.org/10.1016/j.marchem.2020.103908.

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Mexico: Is Organic Matter Recycling in Sediments Disconnected From the Water Column? Front. Mar. Sci. 2021, 8:604330. https://doi.org/10.3389/fmars.2021.604330.

Eitel, E., Owings, S., Belli, K., Beckler, J., Williams, A., Fields, B., Brown, M., Craig, J., Studebaker, O., Nuzzio, D., Taillefert, M. Variations in sediment production of dissolved iron across a continental margin not dominated by major upwelling or riverine inputs. Marine Chemistry. 2020, 220:103750. https://doi.org/10.1016/j.marchem.2020.103750.

Owings, S., Luther III, G.W., and Taillefert, M. Development of a rate law of arsenic oxidation by manganese oxides. Geochimica et Cosmochimica Acta. 2019, 250, 251-267. https://doi.org/10.1016/j.gca.2019.02.003.

Oldham, V, Owings, S, Jones, M, Tebo, B, and Luther III, G.W. “Evidence for the presence of strong Mn(III)-binding ligands in the water column of the Chesapeake Bay. Marine Chemistry. 2015, 171, 58-66.

