Department of Civil & Environmental Engineering
Missouri Water Center (MWC)

Seminar in Environmental Engineering

Time:	Friday, April 3, 2026 2:00 – 3:00 P.M.
Location:	E2511 Lafferre Hall

Dr. David Hanigan graduated from the University of Missouri - Columbia with a B.S. in Civil Engineering in 2009.

He was awarded an M.S. in 2011 from the University of Missouri where his research focused on the removal of trihalomethane (THM) and haloacetic acid (HAA) precursors using MIEX and activated carbon.

His Ph.D. research (2015, Arizona State University) focused on removal, characterization, and identification of N-nitrosamine precursors. His current research interest is in how anthropogenic chemicals (pharmaceuticals, pesticides, etc.) affect human health and ecological endpoints.

After completion of his Ph.D. he was a post-doctoral researcher at Arizona State University studying the implications of nanomaterial use through their life cycle (EPA -LCNano).

Anthropogenic Small Molecules in the Environment and Engineered Solutions

David Hanigan

Associate Professor, Associate Chair for Undergraduate Affairs
Civil & Environmental Engineering
University of Nevada, Reno

https://umsystem.zoom.us/j/95111297625?pwd=ySpt0y3HKSshFWZNVhfuLwwQ6N0drp.1&from=addon

Meeting ID: 951 1129 7625
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Abstract

Anthropogenic small molecules are produced through human activity either intentionally or unintentionally. Some are released to the environment and are ecotoxic, others pose a threat to human health. These chemicals occur at trace concentrations because they are not generally released intentionally, and are diluted into wastewater and surface water flows. Because they occur at trace concentrations, their measurement can be challenging and expensive. This talk will focus on recent efforts to 1) understand PFAS and pharmaceutical occurrence in the Great Basin including several endorheic lakes, 2) PFAS treatment opportunities (Far UV light, thermal), and 3) impacts of wildfire and urban-fire DOM to drinking water sources.