



ENVIRONMENTAL &
WATER RESOURCES
INSTITUTE

Can Smarter Watersheds Accurately Monitor Emerging Contaminants?

Dr. David Sanchez



Thursday, April 20th

Water can become unsafe and unfit for human use when contaminants of emerging concern (CECs) accumulate above certain thresholds. These contaminants include pharmaceuticals, personal care products, pesticides, antibiotics, flame retardants, fragrances, plasticizers, herbicides and other industrial chemicals. The question for environmental engineers is how do we monitor tens of thousands of water bodies for hundreds/thousands of chemicals accurately and in real-time to keep our water safe?

This talk will discuss the opportunities and challenges of deploying smart (remote, wireless, real-time) water quality monitoring systems for different environmental applications and for the purpose of trying to monitor CECs.

Dr. David Sanchez is an associate professor at the University of Pittsburgh in the Civil and Environmental Engineering Department and the Associate Director of the Mascaro Center for Sustainable Innovation. His research lab, [Sustainable Design Labs](#), focuses on fusing analytical chemistry, sustainability design principles and data analytics to address Water and Sustainability grand challenges. Current thrusts focus on Smarter Watersheds for Emerging Contaminants, Bioelectrochemical systems, and advanced oxidation and separation processes.



Program Schedule:

6:00-6:30 PM – Social, Cash Bar

6:30-7:00 PM – Buffet Dinner

7:00-8:00 PM – Presentation
followed by Q&A

Thursday, April 20th at 6:00 PM

Roland's Seafood Grill

1904 Penn Ave, Pittsburgh, PA 15222

Cost: Members \$20; Non-members \$30; Students Free

1.0 *PDH Certificate Upon Attendance*

Register at [ASCE Pittsburgh Section - EWRI Smart Sewers TechTalk \(asce-pgh.org\)](#)

or email Alen Gusa (alen.gusa@mbakerintl.com)

Learn more about Dr. Sanchez's research:

Website: [Sustainable Design Labs](#)