



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

**Time:**

**Friday, March 13, 2026**  
**2:00 – 3:00 P.M.**

**Location:**

**E2511 Lafferre Hall**



### **Kimberly Parker**

Dr. Kimberly Parker is an Associate Professor at Washington University in St. Louis (WashU), where her team focuses on understanding environmental contaminant behavior and minimizing risks to human and ecosystem health. Her research has been recognized by the Paul V. Roberts/AEESP Outstanding Doctoral Dissertation Award, the Marie Curie Individual Fellowship, the NSF CAREER Award.

Dr. Parker completed her B.S. in the Department of Civil & Environmental Engineering at the University of Illinois in Urbana-Champaign and her M.S. in the Department of Chemical & Environmental Engineering at Yale University. Dr. Parker earned her Ph.D. in Environmental Engineering & Science from Stanford University in 2016, where she investigated halogen oxidants in sunlit seawater and drinking water treatment.

### **Environmental Chemistry for Agriculture & Health**

Kimberly Parker

Associate Professor, Washington University in St. Louis

(WashU)

[https://umsystem.zoom.us/j/97333467632?  
pwd=5SFnXlvp5S54xvXybfQHZCOPQYfce0T.1&from=addon](https://umsystem.zoom.us/j/97333467632?pwd=5SFnXlvp5S54xvXybfQHZCOPQYfce0T.1&from=addon)

Meeting ID: 973 3346 7632

Passcode: 128496

#### **Abstract:**

Efficient and effective agriculture is critical to support a growing population; however, some agricultural practices, such as the use of pest control chemicals, can have unintended impacts on human health and the environment. In this presentation, I will share our work applying environmental chemistry and engineering principles to understand and prevent these harmful impacts. First, I will discuss our efforts to develop more effective strategies to characterize and prevent volatilization of the herbicide dicamba, which has caused extensive unintended damage to non-target crops and other vegetation. Second, I will share our work conducted as part of Trusted Tap, an NSF-funded Convergence Accelerator project, that aims to use household point-of-use water filters to provide simultaneous protection from and monitoring of agrochemical contaminants in private well water. Overall, our research aims to support safer and more sustainable practices in agriculture and rural communities to improve health and protect ecosystems.