



Environmental Engineering
UNIVERSITY OF COLORADO **BOULDER**

Spring 2018 Environmental Engineering Seminar Series

Title: Wastewater Recycling: Engineering Processes, Toxicity Reduction and Protecting the Public Health

Shengkun Dong, Ph.D., Civil and Environmental Engineering, University of Illinois at Urbana Champaign

Date: Wednesday March 7th 2018

Time: 9:00 AM – 10:00 AM

Place: SEEC N128



Abstract

Unprecedented attention to water reuse is occurring because of global water stress. The impact of climate change and environmental degradation is forcing regional and national governments to better manage their water resources. This includes the reuse of wastewater effluents from municipal and agricultural livestock sources. Disinfection of these wastewaters is essential to prevent the spread of pathogens, however, little is known about the adverse impact upon human health and the environment generated by various treatment technologies. In this presentation I will address my results from bench scale research, life cycle and risk analysis simulations and also provide practical engineering interventions to lower possible adverse human health impacts associated with processing of recycled wastewaters.

Shengkun Dong is a Postdoctoral Research Associate in the Department of Civil and Environmental Engineering at the University of Illinois at Urbana Champaign working with Dr. Thanh H. Nguyen and Dr. Michael J. Plewa. His current research focuses on toxicity detection, reduction, and prediction in reused waters. He obtained a Ph.D. and M.S. both in Environmental Engineering from University of Illinois at Urbana Champaign, and a B.S. in Environmental Science from Hong Kong Baptist University. He was awarded a travel fellowship to the 2017 Gordon Research Conference on DBPs and presented an invited talk at the Gordon Research Seminar. In 2017 he mentored an underrepresented undergraduate student during the University of Illinois Sumer Research Opportunities Program. Dr. Dong is an avid rock climber and mountaineer.