

Adapting to the 21st century through regenerative ecological engineering – the case of urban and peri-urban water reuse

Dr. June Garcia-Becerra ¹

Water availability and quality are rapidly changing by both local and global climate changes (CCs). To address these disruptions to our current civilizations, it is necessary to generate mitigation and adaptation strategies to the projected CCs. Creating innovative system-based water and sanitation solutions is imperative to build a sustainable and resilient scenario. In this talk, Dr. Garcia-Becerra presents her work on the development of household scale water reuse technologies, from basic research in the lab to transdisciplinary fieldwork with communities. She will also discuss her work in understanding the biodegradation of micropollutants in wastewater. In addition, she will present her studies on strategic socio-technological transformations needed to create communities with sustainable and resilient circular water metabolisms.

¹UNBC School of Engineering, University of Northern British Columbia, Prince George, B.C., V2N4Z9, Canada (june.garcia-becerra@unbc.ca).