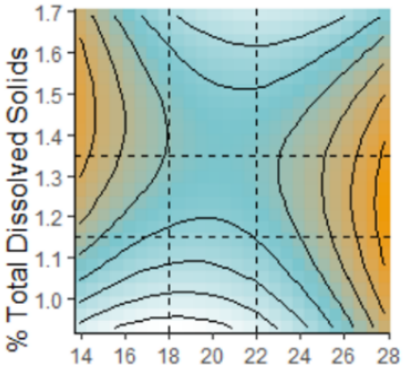
Virtual Department Seminar Series

UCDAVIS FOOD SCIENCE AND TECHNOLOGY

The Science of Brewing Coffee



Prof. William Ristenpart

Professor of Chemical Engineering

& Director, UC Davis Coffee Center
University of California Davis

4:10 PM PST, Wednesday January 26, 2022

Join URL: https://ucdavis.zoom.us/j/93150248801

BIO: William Ristenpart is a Professor of Chemical Engineering and the founding director of the Coffee Center at the University of California Davis. He received his Ph.D. from Princeton University and did his postdoctoral research at Harvard University. In 2012, Prof. Ristenpart co-developed ECH 1, "The Design of Coffee," which is now the most popular elective general education course on campus, with about 2000 students per year. His research expertise is in complex transport phenomena, with current research topics including nanoparticle electrokinetics, airborne disease transmission, and extraction dynamics of coffee.

SUMMARY: At first glance, brewing coffee seems simple: how difficult can it be to pour hot water over a brown powder? In reality, coffee is a fantastically complicated beverage composed of hundreds of different bitterants, acids, and aromatic molecules, and minor changes in the method of brewing have outsize impact on the resulting quality of the beverage. In this talk, I review recent advances made by the UC Davis Coffee Center in our understanding of the physics, chemistry, and sensory aspects of coffee, with an emphasis on understanding how to precisely control the brewing process to yield desired attributes.