

FOOD SCIENCE AND TECHNOLOGY

Exit Seminar



The Extraction Dynamics and Sensory Quality of Full Immersion Brewed Coffee

Jiexin (Jessie) Liang

June 15th, 2023, 9 – 10 am

1207 RMI South

or via zoom: https://ucdavis.zoom.us/j/97133167471

ABSTRACT: Full immersion brewing is a widely used technique in the coffee industry, with notable applications including coffee cupping, cold brew, and French press. A diffusion-limited mass transfer model was updated and extended to capture the dynamic total dissolved solids (TDS) and extraction in full immersion brews at various brewing parameters including temperature, brew ratio, grind size, and agitation. Work here focused on measuring and predicting the TDS and extraction in response to different coffee preparation factors, investigating the role of coffee ground sedimentation in extraction dynamics, and exploring the sensory profiles of full immersion coffee over time at different roast levels and brewing temperatures. This seminar will discuss the driving factors in extraction and sensory properties of full immersion brewed coffee, along with practical implications for the coffee industry.

BIO: Jessie is a Ph.D. candidate in the Food Science and Technology Department at the University of California, Davis. She previously received her B.S. in Chemical Engineering, also from UC Davis. She joined the UC Davis Food Science graduate program in 2019 and is currently a member of Dr. Ristenpart's Lab and the UC Davis Coffee Center focusing on extraction and sensory aspects of coffee research.