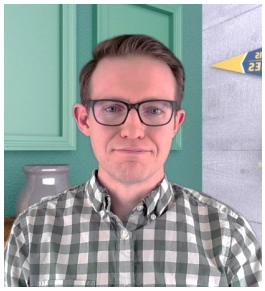
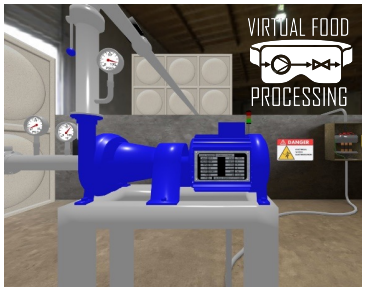
Department Seminar Series

UC DAVIS
FOOD SCIENCE AND TECHNOLOGY

4:10 PM, Wednesday Nov. 3, 2021

FST290 students meet in person in Room 1207 RMI-South
Others may attend remotely by Zoom:
https://ucdavis.zoom.us/j/92208083430





The Virtual Food Processing Facility

Christopher Simmons, Ph.D.

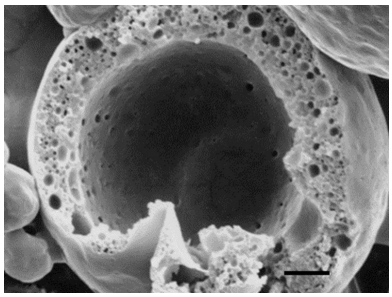
Department Chair

Professor

Food Science and Technology
UC Davis

Dr. Simmons received his Ph.D. in Biological Systems Engineering from the University of California, Davis. He joined the Department of Food Science and Technology in 2013, focusing on food systems sustainability, and has served as department chair since 2021.

SUMMARY: The unprecedented disruption of traditional course instruction stemming from the pandemic created a need for new instructional methods, particularly for lab courses that rely on experiential learning. In response, the Simmons Lab and collaborators developed the Virtual Food Processing Facility, a suite of virtual interactive environments, experienced through personal computer or virtual reality headset, to allow students to remotely investigate and utilize simulated food processing equipment. The development, deployment, and evaluation of the Virtual Food Processing Facility will be presented.



A story about an interface

Moshe Rosenberg, D.Sc.

Professor and Specialist, Dairy Engineering and Technology

Food Science and Technology

UC Davis

Dr. Rosenberg received his D.Sc. in Food and Biotechnology Engineering from the Technion, Israel Institute of Technology. He joined the Department of Food Science and Technology in 1990, focusing on Food and Dairy Science, technology, and engineering.

SUMMARY: Reducing milk loss and dairy waste call for rethinking milk processing technologies and for enhancing the quality and shelf life of dairy products. An example is whole milk powder with an oxidative shelf-life of only 6 months. Building of their 3 decades of studying the physico-chemical, functional and microencapsulating properties of milk proteins, Rosenberg's lab developed a milk powder with an oxidative shelf life of at least 20 months. The critical role of the O/W interface in governing the oxidative stability and how it was constructed, modulated and stabilized will be presented.