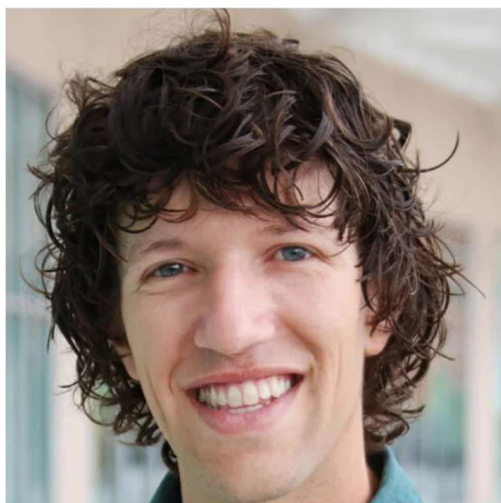


Seminar in Interdisciplinary STEM Research

August 28th – Thursday, 3:05-4:20 PM PST

Location: E&T C-256

HOSTED BY CREST-CATSUS AND SIKAND SITI CENTERS



Jeffrey Santner, PhD

Associate Professor, Department of Mechanical Engineering at California State University, Los Angeles

Dr. Jeffrey Santner is an associate Professor in the Department of Mechanical Engineering. Before joining California State University, Los Angeles in 2017, he earned his Ph.D. in Mechanical and Aerospace Engineering from Princeton University and was a postdoc at Argonne National Laboratory. His major

research interest since graduate school has been combustion – chemistry, modeling, flame dynamics, ignition, pollutants, and experiment uncertainty.

An overview of ongoing combustion research at Cal State LA

Abstract: Combustion accounts for a large portion of the global energy supply, and the majority of our greenhouse gas (and other pollutant) emissions. Many in the field of combustion research aim to improve understanding of combustion phenomena in order to design improved devices that reduce the harmful effects of combustion. I will show an overview of two projects I am currently working on. In the first project, we are measuring the laminar flame speed of mixtures that are tailored to produce information on important reaction rates. In the second project, we are modeling and simulating the effects of mixing at different scales within a common reactor used in combustion research.