COLLEGE OF
Engineering, Computer Science, and Technology

Seminar in Interdisciplinary STEM Research

October 23rd – Thursday, 3:05-4:20 PM PST

Location: E&T C256

HOSTED BY CREST-CATSUS AND SIKAND SITI CENTERS



Travis Hu, Ph.D.

Associate Professor of Mechanical Engineering at Cal State LA

Dr. Travis Hu is an Associate Professor of Mechanical Engineering at Cal State LA and the Director of the Center for Bioinspired and Architectured Materials (CBAM), supported by the National Science Foundation (NSF) through the Partnership for Research and Education in Materials (PREM) program. In this role, he leads multidisciplinary research and education initiatives that integrate materials science, biology, and engineering to design next-generation sustainable and adaptive materials. Dr. Hu has served as a STEM-NET Faculty Fellow since 2024 and is currently in his second term (2025-2026), representing Cal State LA across the 22-campus CSU system to advance collaborative STEM research and education. Since joining Cal State LA in 2016, he has established a vibrant research program in applied mechanics, nanomechanics, and materials science, with a focus on biologically inspired design principles and energy-efficient engineering solutions. Dr. Hu's research draws inspiration from nature's optimized systems to address complex engineering challenges. His expertise includes nanotribology, interfacial phenomena, biomimetics, low-dimensional nanomaterials, and multiscale modeling and simulation. He is a dedicated advocate for strengthening the U.S. STEM workforce, leading and contributing to initiatives such as the ECST FYrE program, NSF CREST (CATSUS and CEaS), REU, and RUI programs, DoD DURIP, and the Upward Bound Program. These efforts aim to broaden participation in STEM education and research, particularly among underrepresented groups. Before joining Cal State LA, Dr. Hu was a Teaching Assistant Professor at the University of Denver and held postdoctoral research positions at Case Western Reserve University, the University of Florida, and the University of Delaware, where he developed multifunctional carbon, polymeric, and hybrid materials for energy, biomedical, and defense applications.

PREM CBAM at Cal State LA - Building Collaborative Pathways in Materials Research and Education

The *Center for Bioinspired and Architectured Materials* (CBAM) at Cal State LA, supported by the NSF Partnerships for Research and Education in Materials (PREM) program, is fostering a collaborative and inclusive research community that bridges materials science, engineering, and education. In partnership with the UC Irvine NSF Materials Research Science and Engineering Center (MRSEC) for Complex and Active Materials, CBAM is creating hands-on research and training opportunities that prepare students for advanced studies, research careers, and leadership in materials science and related disciplines, while supporting faculty engagement across diverse fields.This talk will introduce the PREM CBAM initiative, outline available resources and participation opportunities, and share our vision for expanding research capacity and collaboration as we prepare for the next phase of the PREM program. The session will also feature brief student research highlights and an open discussion on how faculty, students, and administrators can contribute to, and benefit from, this growing effort.

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