

CHEMICAL & MATERIALS ENGINEERING

Department Head: Joseph H. Holles¹

Associate Department Head: Paul K. Andersen

Professors Brewer, Holles¹, Houston, Luo, **Associate Professors** Andersen, Manz, Martinez-Monteagudo, Zhou **Assistant Professors** Gallegos, Li **Emeritus Professors** Ghassemi, Mitchell, Rockstraw¹ **Professors of Practice** Taylor

Research Interests:

P.K. Andersen (Ph.D., University of California, Berkeley) physicochemical hydrodynamics, nuclear chemical engineering, modeling and simulation, education and training; *C.E. Brewer* (Ph.D., Iowa State) biomass thermochemical processing, sustainable agriculture, biorenewable resources, brewery engineering; *A.A. Gallegos* (Ph.D., University of California Riverside) computational modeling of soft matter, molecular thermodynamics, polymer physics; *J.H. Holles*¹ (Ph.D., Virginia) heterogeneous catalysis, structure/property relationships in catalysis, pseudomorphic overlayer bimetallic catalysts, research preparation for undergraduate and graduate students; *J. P. Houston* (Ph.D., Texas A&M) biomedical engineering, biophotonics, flow cytometry; *H. Li* (Ph.D., Washington State) heterogeneous catalysis, sustainable technologies, waste valorization; *H. Luo* (Ph.D., Tulane) nanostructured materials, thin films, photovoltaics, batteries, electrocatalysts, photocatalysts; *T.A. Manz* (Ph.D., Purdue) quantum chemistry simulations of materials, catalysis, and space physics; *S. Martinez-Monteagudo* (Ph.D., University of Alberta, Canada) food engineering, valorization of byproduct streams, synthesis of sweeteners, and green extraction methods; *S. Taylor* (Ph.D., Clemson) synthesis and characterization of materials, brewing, food processing; *M. Zhou* (Ph.D., New Mexico State) hydrogen production, CO₂ reduction, fuel cell and solar cell.

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