

**Department of Mechanical Engineering**  
**Faculty Research Interests by Name**

<u>Faculty Member</u>	<u>Research Interests</u>
Argento, Alan	Structural dynamics and engineering materials
Cherng, John	Vibrations, acoustics, NVH
Chow, Chi	Fatigue, fracture and damage mechanics, crash and impact analysis
Huntley, Hugh	Engineering materials and manufacturing design
Kang, Hong Tae	Fatigue, automotive durability, road load prediction, spot weld fatigue
Li, Ben	Computational study of multi-scale and multi-physical phenomena in thermal fluids, materials processing and manufacturing
Little, Robert	Reliability, modes of failure, fatigue, mechanical design
Mallick, P.K.	Materials and manufacturing processes, solid mechanics, failure analysis and design, composites, automotive materials and processing
Mei, Carole	Vibration analysis and vibration control
Mitchell, William	Materials and manufacturing processes
Mohanty, Pravansu	Engineering materials, manufacturing design, nanotechnology, spray deposition forming
Ratts, Eric	Thermodynamics, heat transfer and cryogenics
Reyes-Villanueva, German	Lightweight fiber-reinforced composite materials and metal alloys
Sengupta, Subrata	Waste heat management and utilization, computational fluid dynamics
Shamim, Tariq	Combustion, emissions heat transfer, catalysts
Shim, Taehyun	Vehicle dynamics

Varde, Keshav

Thermal/ fluid sciences, thermodynamics, combustion,  
alternative energy sources/fuels, fuel cells, catalysts

Zhang, Yi

Design and manufacturing of gear systems, mechanical  
power transmission

Zikanov, Oleg

Fluid mechanics