

**KSU Mechanical and Nuclear Engineering Department  
Faculty Members and Research Areas**

<b>Faculty Member</b>		<b>E-Mail</b>	<b>Room</b>	<b>Phone (785)</b>
	<i>Dynamic Systems and Controls</i>			
<b>Dale Schinstock</b>	Unmanned aerial vehicle (UAV) systems including control, guidance, and remote sensing systems, Electromechanical systems, Machine and motion controls, and Servo systems.	dales@mne.ksu.edu	RA3041	532-2608
<b>Garth Thompson</b>	Automatic control systems, especially digital and embedded control systems. Aircraft avionics, navigation and control automation, simulation and design.	jgt@ksu.edu	RA3019	532-2614
<b>Warren White</b>	Control theory, control design for nonlinear electromechanical systems with emphasis on underactuated systems, holonomic and non-holonomic dynamic systems, vibrations, measurements and instrumentation, estimating building heat loads created by electric power equipment.	wnw@ksu.edu	RA3024	532-2615
	<i>Mechanics, Materials, and Design</i>			
<b>Liang-Wu Cai</b>	Phononic materials, wave phenomena, nondestructive evaluation, mechanics of composite materials, and computational mechanics.	cai@ksu.edu	RA3031	532-5619
<b>Prakash Krishnaswami</b>	Computer-aided mechanical design, mechanisms, kinematics, dynamics, and optimal design.	prakash@ksu.edu	RA3033	532-7182
<b>Kevin Lease</b>	Theoretical, computational and experimental aspects of deformation, fatigue and fracture of engineering materials.	lease@ksu.edu	RA3017	532-7180
<b>David Pacey, PE</b>	Instrumentation and measurement systems, machine design, fluid power hydraulics, and dynamic system modeling.	pacey@ksu.edu	RA3052	532-2610
<b>Dan Swenson</b>	Interactive implementation of finite element methods; linear, nonlinear and dynamic fracture; coupled hydraulic/thermal/stress analysis of geothermal reservoirs; and topological representation of problem geometry.	swenson@ksu.edu	RA3051	532-2320
<b>Youqi Wang</b>	Nano-scale simulation, mechanics of composites, manufacture and processing of composites, finite element analysis, and textile processes.	wang@mne.ksu.edu	RA3048	532-7181
<b>X.J. Xin</b>	Finite element method, powder consolidation, nano-scale layered materials, fracture, fatigue, composite materials, computational mechanics, dislocation theory, and constitutive modeling.	xin@mne.ksu.edu	RA3038	532-2612

<b>Faculty Member</b>		<b>E-Mail</b>	<b>Room</b>	<b>Phone (785)</b>
<i><b>Nuclear Engineering</b></i>				
<b>William Dunn</b>	Radiation physics and engineering including nondestructive testing, quantitative analysis, and detection of hidden explosives and contraband; radiation shielding; radiation transport analysis; Monte Carlo simulation; mathematical modeling and inverse analysis.	dunn@mne.ksu.edu	RA3046	532-5628
<b>Douglas McGregor</b>	Design, development, and deployment of radiation detectors and detection systems; nuclear measurements of various ionizing and non-ionizing radiation; semiconductor device physics, semiconductor device design, and semiconductor device fabrication.	mcgregor@ksu.edu	RA3018	532-5284
<b>Ken Shultis</b>	Remote sensing, transport theory and radiative transfer, risk analysis, radiation protection and shielding, numerical analysis, radiological assessment, and utility power analysis.	jks@ksu.edu	RA3012	532-5626
<i><b>Thermal/Fluid Systems</b></i>				
<b>Bruce R. Babin</b>	Thermal systems analysis with emphasis in two-phase flow.	babin@ksu.edu	RA3042	532-5625
<b>B. Terry Beck</b>	Experimental heat transfer, fluid mechanics, two-phase flow, and optical measurements.	beck@mne.ksu.edu	RA3044	532-2604
<b>Kirby Chapman</b>	Modeling and experimentation studies of turbomachinery and internal combustion engine to determine air emission reduction strategies; development and use of sustainable energy sources with a small environmental footprint.	chapman@ksu.edu	NGML, 245 Levee	532-2319
<b>Steve Eckels</b>	Experimental fluid mechanics and two-phase flow.	eckels@mne.ksu.edu	SE64	532-2283
<b>Don Fenton</b>	Refrigeration, thermal systems design, combustion, and thermodynamics.	fenton@mne.ksu.edu	RA3013	532-2322
<b>Mo Hosni</b>	Fluid mechanics, heat transfer, experimental techniques and uncertainty analysis.	hosni@mne.ksu.edu	RA3002	532-2321
<b>Byron Jones</b>	Heat and mass transfer between the human body and its surrounding environment, heat and mass transfer in clothing systems, human thermal systems simulation, and thermal measurements and instrumentation.	jones@ksu.edu	RA1048	532-5844
<b>Sameer Madanshetty</b>	Physical acoustics, multiphase fluid mechanics, acoustic microcaviation, active sound cancellation, and engineering design for translating basic science research into novel products and processes.	sameer@mne.ksu.edu	RA3022	532-2609
<b>Zhongquan (Charlie) Zheng</b>	Computational fluid dynamics and heat transfer, aerodynamics, vortex dynamics, turbulent flow, aeroacoustics, nanoparticle/fluid interactions, and biofluid dynamics.	zzheng@mne.ksu.edu	RA3039	532-6132