

**COLLEGE OF ENGINEERING**  
**FACULTY AREAS OF EXPERTISE BY DEPARTMENT**  
**Academic Year 2021-2022**

DEPARTMENT OF CHEMICAL ENGINEERING		
NAME	CONTACT INFORMATION	RESEARCH INTERESTS AND EXPERTISE
Arce, Pedro Professor	<a href="mailto:parce@tntech.edu">parce@tntech.edu</a> (931) 372-3267	Nanostructured materials- <i>With Functional Performance</i> (Health Care Engineering Applications: Hydrogels for clinical diagnostics, wound healing, math-assisted medicine, tissue scaffolds and assisted drug delivery) • Micro- and Nano-flows in Biophysical Systems (Microcirculatory and renal system pathologies, arterial stenosis, kidney failure, etc.) • Environmental catalysis (Advanced oxidation in water, soil and air; photocatalytic clean energy production, electrokinetics-based remediation; battery and fuel cell materials) • Engineering education: (collaborative-, creative- and innovation-driven learning; constructionistic approaches)
Arias Chavez, Laura H. Assistant Professor	<a href="mailto:lchavez@tntech.edu">lchavez@tntech.edu</a> (931) 372-3678	Improving sustainability at the water - energy nexus, especially through the use of membrane technologies. • Fabrication and characterization of polymeric membranes for reverse osmosis, forward osmosis, and filtration processes. • New fabrication strategies for improving membrane fouling resistance and selectivity. • Development and evaluation of applications in desalination and the recovery of materials and energy from 'waste' water and other non-traditional resources. • Experimental (wet chemistry) work and process-level modelling.
Biernacki, Joseph J. Professor	<a href="mailto:jbiernacki@tntech.edu">jbiernacki@tntech.edu</a> (931) 372 3667	Modeling of multi-scale materials systems composite concrete systems
Ghorashi, Bahman Professor	<a href="mailto:bghorashi@tntech.edu">bghorashi@tntech.edu</a> (931)372-6921	Agile Manufacturing • Rheology and non-Newtonian fluid flow • Blockchain Technology and its applications in chemical industry • M2M communication and logistics • Leadership in Higher Education
Rice, Cynthia A. Associate Professor	<a href="mailto:crice@tntech.edu">crice@tntech.edu</a> (931) 372-6059	Electrocatalysis • Electrochemistry • Membrane electrode assembly design • Fuel cell material diagnostics – performance, durability, kinetics, and mass transport • Fuel cell automotive – cold-starts using a prototype quasi-adiabatic fuel cell fixture and cathode catalyst layer durability • Direct formic acid fuel cells for portable power – anode catalyst layer design and efficient CO <sub>2</sub> byproduct removal
Sanders, Robby Associate Professor	<a href="mailto:rsanders@tntech.edu">rsanders@tntech.edu</a> (931) 372-3494	Innovation-driven learning with a focus on student learning at the interface of disciplines (i.e., engineering-nursing, engineering-business, etc.) • Clinical diagnostics and new therapeutics for diseases of the lungs • Development, utilization, and characterization of soft gel materials • Wound healing

<b>Stretz, Holly</b> Interim Chair and Professor	<a href="mailto:hstretz@tntech.edu">hstretz@tntech.edu</a> (931)372-3495	Nanocomposite water treatment membranes • Research program in interfaces in 3-D printing • High-throughput on demand manufacturing of pharmaceuticals • Nanomaterials as sensors • Expertise in polymer nanocomposites • Polymer dynamics at 4K • Nanoparticle fluorescent sensing
<b>Zhang, Liqun (Laura)</b> Assistant Professor	<a href="mailto:lzhang@tntech.edu">lzhang@tntech.edu</a> (931) 372-3604	Molecular simulation on biomass modified asphalt, warm mix asphalt • Simulations and modeling on structure and dynamics of human beta defensin type 3 • Interaction with lipid membranes and receptors
<b>DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING</b>		
NAME	CONTACT INFORMATION	RESEARCH INTERESTS AND EXPERTISE
<b>Avera, Julie B.</b> Lecturer	<a href="mailto:javera@tntech.edu">javera@tntech.edu</a> (931) 372-3490	Water resources management • Waste water treatment plant operations • Fate and transport of pollutants in the environment • Water quality of impoundments • Non-point source pollution
<b>Badoe, Daniel A.</b> Professor	<a href="mailto:dbadoe@tntech.edu">dbadoe@tntech.edu</a> (931) 372-3490	Urban travel demand modeling • Transportation data collection • Travel behavior analysis • Traffic monitoring programs
<b>Click, Steven</b> Associate Professor	<a href="mailto:sclick@tntech.edu">sclick@tntech.edu</a> (931) 372-6464	Traffic signal design, timing, operations, and analysis • Traffic signal system design, timing, operations, and analysis • Non-traditional intersection design, operations, and analysis • Non-traditional interchange design, operations, and analysis • Highway traffic simulation modeling
<b>Crouch, L. K.</b> Professor	<a href="mailto:lcrouch@tntech.edu">lcrouch@tntech.edu</a> (931) 372-3196	Construction materials • Aggregates • Portland cement concrete • flowable fill • Bituminous materials.
<b>Datta, Tania</b> Associate Professor	<a href="mailto:tdatta@tntech.edu">tdatta@tntech.edu</a> (931) 372-3446	Biological Wastewater Treatment Process and Design • Applied Environmental Microbiology • Water Quality/Watershed Management • Bioenergy Production through Anaerobic Processes • Low-Cost Technologies for Water and Sanitation in Developing Countries.
<b>Henderson, Craig</b> Professor	<a href="mailto:chenderson@tntech.edu">chenderson@tntech.edu</a> (931)372-3062	Masonry, concrete and steel testing and design • Structural dynamics and earthquake engineering • Computational structural modeling
<b>Huff, Tim</b> Assistant Professor	<a href="mailto:thuff@tntech.edu">thuff@tntech.edu</a> (931) 372-3605	Earthquake engineering • Seismic design of structures • Ground motion selection and modification for structural analysis • Nonlinear analysis of structures in practice • Seismic isolation • Bridge design
<b>Huo, Sharon</b> Associate Provost and Professor	<a href="mailto:xhuo@tntech.edu">xhuo@tntech.edu</a> (931) 372-3463	Structural analysis • Reinforced concrete design • Prestressed concrete design • Structural steel design • Bridge design
<b>Kalyanapu, Alfred</b> Associate Professor	<a href="mailto:akalyanapu@tntech.edu">akalyanapu@tntech.edu</a> (931) 337-3561	Regional scale flood modeling simulation • GIS applications in Civil and Environmental Engineering • Hydrologic monitoring and analysis • Low-cost technologies for watershed hydrology • Integrated watershed management • Computational hydraulics and hydrology • Climate impacts

<b>Liu, Jane</b> Professor	<a href="mailto:jliu@tntech.edu">jliu@tntech.edu</a> (931) 372-3256	Solid mechanics • Computational mechanics • Composite materials • Plates and shells • Vibration analysis • Computational algebraic geometry • Symbolic computer system in engineering applications
<b>Mohr, Benjamin</b> Chair and Associate Professor	<a href="mailto:bmohr@tntech.edu">bmohr@tntech.edu</a> (931) 372-3454	Durability, microstructure, and chemistry of cement-based materials • Early-age behavior of cement and concrete • Fiber-reinforced concrete • Supplementary cementitious materials
<b>Otuonye, Francis</b> Associate VP of Research and Professor	<a href="mailto:fotuonye@tntech.edu">fotuonye@tntech.edu</a> (931) 372-3374	Geotechnical engineering • Mining engineering • Health and safety impacts
<b>Ramirez, Guillermo</b> Associate Professor	<a href="mailto:gramirez@tntech.edu">gramirez@tntech.edu</a> (931) 372-3261	Theoretical and computational mechanics • Mathematical formulation and corresponding computer implementation to describe the electro-mechanical behavior of solids under different types of environments
<b>VandenBerge, Daniel</b> Assistant Professor	<a href="mailto:dvandenberge@tntech.edu">dvandenberge@tntech.edu</a> (931) 372-3257	Rapid drawdown analysis • Behavior of compacted clays • Fully softened shear strength • Levee seepage • Dam failures • Geotechnical reliability analyses • Sustainable earth structures • Foamed glass aggregate • Distributed fiber optic sensing • Engineering education
<b>Weathers, Lenly</b> Associate Professor	<a href="mailto:lweathers@tntech.edu">lweathers@tntech.edu</a> (931) 372-3539	Transport of pollutants in the environment • Transformation of chlorinated compounds • Oxidized metals and other pollutants in anaerobic environments in the presence of metallic iron
<b>COMPUTER SCIENCE</b>		
<b>NAME</b>	<b>CONTACT INFORMATION</b>	<b>RESEARCH INTERESTS AND EXPERTISE</b>
<b>Brown, Eric</b> Adjunct Professor and Assistant Director of Cybersecurity Education, Research and Outreach Center	<a href="mailto:elbrown@tntech.edu">elbrown@tntech.edu</a> (931)-372-3602	Agile / Scrum Project Management • Computer Science / Cybersecurity Education • Cybersecurity risk assessment • Information Technology
<b>Crockett, April</b> Lecturer	<a href="mailto:ACrockett@tntech.edu">ACrockett@tntech.edu</a> (931)-372-6435	Computer Science Education • Human-Computer Interaction • Diversity & Inclusion in Computer Science
<b>Eberle, William (Bill)</b> Professor	<a href="mailto:weberle@tntech.edu">weberle@tntech.edu</a> (931) 372-3278	Data Mining • Graph-based Anomaly Detection • Fraud Detection
<b>Elizandro, David</b> Professor	<a href="mailto:delizandro@tntech.edu">delizandro@tntech.edu</a> (931) 372-3386	Institutional leadership • Strategic planning • Systems integration and effectiveness
<b>Gannod, Gerald</b> Chair and Professor	<a href="mailto:jgannod@tntech.edu">jgannod@tntech.edu</a> (931) 372-3691	Software reverse engineering • Web and mobile development (specifically web services in enterprise computing) • Predictive analytics • Visualization • Agile approaches for computing education

<b>Ghafoor, Sheikh</b> Professor	<a href="mailto:sghafoor@tntech.edu">sghafoor@tntech.edu</a> (931) 372-3687	Programming models and tools for Heterogeneous High Performance Computing • High Performance Messaging Passing for Exa-Scale Systems • Elastic Parallel Systems • Computational Earth Science • Cyber Physical System and HPS Security • Computer Science Education
<b>Gupta, Manaak</b> Assistant Professor	<a href="mailto:mgupta@tntech.edu">mgupta@tntech.edu</a> (931)-372-3525	Foundational Cyber and Computer Security • Access Control Models and Architectures • Secure Cyber Physical Systems and Internet of Things • Intelligent Transportation, Connected Cars and Smart Farming • AI and Machine Learning assisted Security • Deep Learning based Malware Analysis • Cloud and Big Data Security
<b>Ismail, Muhammad</b> Assistant Professor	<a href="mailto:mismail@tntech.edu">mismail@tntech.edu</a> (931)-372-6287	Cyber-physical security • Networking • Smart grids • Blockchain • Resource allocation • Machine learning • Optimization • Stochastic modeling
<b>Rahman, Akond</b> Assistant Professor	<a href="mailto:arahman@tntech.edu">arahman@tntech.edu</a>	DevOps • Secure Software Development
<b>Rogers, Michael</b> Professor	<a href="mailto:mrogers@tntech.edu">mrogers@tntech.edu</a> (931)-372-6304	Control Systems Security • Systems Software Security • Distributed and High Performance Computing • Network Protocols
<b>Scott, Stephen</b> Professor	<a href="mailto:sscott@tntech.edu">sscott@tntech.edu</a> (931) 372-6484	Cloud, cluster, and grid computing • Resilient high performance distributed, heterogeneous, and parallel computing
<b>Shannigrahi, Susmit</b> Assistant Professor	<a href="mailto:sshannigrahi@tntech.edu">sshannigrahi@tntech.edu</a>	Computer Networks, Future Internet Architectures • Networking IoT Devices • Future Mobile Communications
<b>Siraj, Ambareen</b> Professor and Director of Cybersecurity Education, Research and Outreach Center	<a href="mailto:asiraj@tntech.edu">asiraj@tntech.edu</a> (931) 372-3448	Cyber-Physical Systems Security • Network intrusion detection • Situational awareness in security • Security education • Security workforce development
<b>Talbert, Doug</b> Assistant Chair and Associate Professor	<a href="mailto:dtalbert@tntech.edu">dtalbert@tntech.edu</a> (931) 372-6178	Machine learning • Explainability and Trust in Artificial intelligence • Clinical informatics
<b>Ulybyshev, Denis</b> Assistant Professor	<a href="mailto:dulybyshev@tntech.edu">dulybyshev@tntech.edu</a> (931)-372-6127	Data Privacy • Database / Cloud / OS / Web Security • Language-based Security • Information Retrieval (Search Engines, Search Engine Optimization) • Cyber-Physical / Industrial Control Systems • Blockchain-based Technologies • Machine Learning (Recommendation Systems, Anomaly Detection) • Cryptography • Vehicle-to-Everything Communication Systems
<b>ELECTRICAL AND COMPUTER ENGINEERING</b>		
<b>NAME</b>	<b>CONTACT INFORMATION</b>	<b>RESEARCH INTERESTS AND EXPERTISE</b>
<b>Alouani, Ali T.</b> Professor	<a href="mailto:aalouani@tntech.edu">aalouani@tntech.edu</a> (931) 372-3383	Autonomous Robot Design & Control • Artificial Intelligence • Applied deep Learning • Sensor Data Fusion • Mechatronics Systems • Smart Grid • Home Health Monitoring

<b>Austen, Jeffrey R.</b> Associate Professor	<a href="mailto:jausten@tntech.edu">jausten@tntech.edu</a> (931) 372-3485	Signal processing • Communication systems
<b>Baswell, Mike</b> Lecturer	<a href="mailto:mbaswell@tntech.edu">mbaswell@tntech.edu</a> (931)-372-6156	Programmable Logic Controller • Control Systems • Battery Voltage Regulation
<b>Bhattacharya, Indranil</b> Associate Professor	<a href="mailto:ibhattacharya@tntech.edu">ibhattacharya@tntech.edu</a> (931) 372-3352	High-Efficiency Solar Cells • High-Energy-Density Sodium and Lithium-ion Batteries • Wireless Power Transfer • Semiconductor Electronics • Photonics and Optics • Electromagnetics
<b>Bruce, J.W.</b> Associate Professor	<a href="mailto:jwbruce@tntech.edu">jwbruce@tntech.edu</a> (931)372-3453	Data converter architectures • Embedded and cyber-physical systems design • Quantum computing logic systems • Integration of unmanned aerial vehicles in the national airspace • Engineering education
<b>Bruce, Lori</b> Professor, Provost, and VP of Academic Affairs	<a href="mailto:lbruce@tntech.edu">lbruce@tntech.edu</a> (931) 372-3224	Remote sensing • Hyperspectral Imaging • Precision Agriculture • Image Analysis • Artificial Intelligence • Machine Learning • Pattern Recognition • Feature Extraction • Data Fusion • Data Analytics
<b>Dean, Tim</b> Adjunct Professor	<a href="mailto:TDean@tntech.edu">TDean@tntech.edu</a>	Electromagnetics • Industrial Automation (PLCs, Machine Vision, and Robotics)
<b>Elfouly, Tarek</b> Associate Professor	<a href="mailto:telfouly@tntech.edu">telfouly@tntech.edu</a> (931)-372-3847	Wireless Networks • Wireless sensor networks • Structure health monitoring • Machine learning and its applications • Ehealth and mHealth • Assistive technologies
<b>Fouda, Mostafa</b> Post-Doctoral Research Associate	<a href="mailto:mfouda@tntech.edu">mfouda@tntech.edu</a> (931)-372-3450	Cyber Security • Wireless Networks • Deep Learning, Blockchain • IoT • Smart Grid
<b>Hasan, Syed</b> Associate Professor	<a href="mailto:shasan@tntech.edu">shasan@tntech.edu</a> (931) 372-3462	Artificial Intelligence for Edge Computing • Edge Intelligence • Security Threats in Deep Learning Architectures • Internet of Things' • Vulnerabilities against Hardware Based Attacks • Machine Learning Algorithms on Hardware
<b>Johnson, Wayne</b> Research	<a href="mailto:wjohnson@tntech.edu">wjohnson@tntech.edu</a> (931)-372-3460	Electronics Manufacturing • Extreme Environment Electronics
<b>MacKenzie, Allen</b> Chair and Professor	<a href="mailto:amackenzie@tntech.edu">amackenzie@tntech.edu</a> (931) 372-3397	Wireless Communications and Networking • Dynamic Spectrum Access Systems and Spectrum Policy • Cognitive Radio and Cognitive Networks • Applications of Game Theory and Auction Theory • Error Control Coding
<b>Mahajan, Satish</b> Professor and Director of Center for Energy Systems Research	<a href="mailto:smahajan@tntech.edu">smahajan@tntech.edu</a> (931) 372-3875	Optoelectronics (Lasers; Solar Cells; Optical Fibers) • Electromagnetics • Wireless Charging of EVs • Sensors • Renewable Energy
<b>Mahmoud, Mohamed</b> Associate Professor	<a href="mailto:mmahmoud@tntech.edu">mmahmoud@tntech.edu</a> (931) 372-3677	Security & Privacy in Smart Grid, Vehicular Ad Hoc Network (VANET), and Cloud Applications. • Secure/privacy-preserving Machine learning Models, Blockchain, Cryptography and machine learning.

<b>Ojo, Joseph O.</b> Professor	<a href="mailto:jojo@tntech.edu">jojo@tntech.edu</a> (931) 372-3869	Electric machine analysis and design • Adjustable • Speed motor drives • Power electronic convertors • Control theory applied to power electronics and power systems, power systems economics and deregulation issues
<b>Radman, Ghadir</b> Professor	<a href="mailto:gradman@tntech.edu">gradman@tntech.edu</a> (931) 372-3520	Smart grid • Integration of renewable energy sources • Power system operation/control
<b>Van Neste, Charles</b> Assistant Professor	<a href="mailto:cvanneste@tntech.edu">cvanneste@tntech.edu</a> (931) 372-3682	Alternative forms of energy generation and transmission with a major focus in wireless and quasi-wireless power transfer • High frequency inverter design • Electronic instrumentation • Electromagnetic interactions

#### GENERAL AND BASIC ENGINEERING

NAME	CONTACT INFORMATION	RESEARCH INTERESTS AND EXPERTISE
<b>Craven, Kristine</b> Associate Professor	<a href="mailto:kcraven@tntech.edu">kcraven@tntech.edu</a> (931)372-6027	Teaching and Learning Strategies • Student Success and Retention • First Year Engineering Programs
<b>Tester, John</b> Associate Professor	<a href="mailto:jtester@tntech.edu">jtester@tntech.edu</a> (931)-372-6796	Engineering Education • Engineering Management • Additive Manufacturing • Design for Manufacturing • Systems Engineering • Human Biomechanics • Engineering Systems Test and Evaluation
<b>Wells, S. Michael</b> Assistant Professor	<a href="mailto:mwells@tntech.edu">mwells@tntech.edu</a> (931) 372-3829	Industrial Engineering Human Factors • Global Engineering Communication • Safety
<b>Wilson, Christopher</b> Chair and Associate Professor of Mechanical Engineering	<a href="mailto:chriswilson@tntech.edu">chriswilson@tntech.edu</a> (931) 372-3216	Composite materials testing • Materials properties • Simulation

#### MANUFACTURING AND ENGINEERING TECHNOLOGY

NAME	CONTACT INFORMATION	RESEARCH INTERESTS AND EXPERTISE
<b>Fidan, Ismail</b> Professor	<a href="mailto:ifidan@tntech.edu">ifidan@tntech.edu</a> (931) 372-6298	Additive Manufacturing • Smart Manufacturing • Electronics Manufacturing • STEM Education and Distance Learning/Remote Laboratories
<b>Flatt, Larry</b> Adjunct Professor	<a href="mailto:lflatt@tntech.edu">lflatt@tntech.edu</a>	Fluid Power • Robotics
<b>Kim, Duckbong</b> Assistant Professor	<a href="mailto:dkim@tntech.edu">dkim@tntech.edu</a> (931) 372-3327	Advanced manufacturing • Wire + arc additive manufacturing (WAAM) • Metal big area additive manufacturing (mBAAM) • Data analytics • Machine Vision • High temperature alloys • High entropy alloys (HEAs) • Refractory alloys
<b>Vondra, Fred L.</b> Chair	<a href="mailto:fvondra@tntech.edu">fvondra@tntech.edu</a> (931) 372-3527	Metal casting processes • Foundry tooling materials • Industrial maintenance • Metal Material Properties

#### MECHANICAL ENGINEERING

NAME	CONTACT INFORMATION	RESEARCH INTERESTS AND EXPERTISE
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<b>Abounassif, Ahmed</b> Adjunct Professor	<a href="mailto:aabounassif@tntech.edu">aabounassif@tntech.edu</a> (931)-372-6028	Computational Fluid Dynamics • Eulerian Multiphase Flow Simulations • Thermodynamics • Fluids Mechanics and Heat Transfer
<b>Albakri, Mohammad</b> Assistant Professor	<a href="mailto:malbakri@tntech.edu">malbakri@tntech.edu</a> (931)-372-3737	Computational Mechanics • Structural Dynamics • Meta-Structures • Structural Health Monitoring • Advanced Manufacturing • Experimental Modal Testing
<b>Anton, Steve</b> Associate Professor	<a href="mailto:santon@tntech.edu">santon@tntech.edu</a> (931) 372-3287	Smart materials • Piezoelectric sensing • Structural health monitoring • Biomedical sensing • Energy harvesting • 3D printing • Robotics-based STEM education
<b>Brookshear, Daniel</b> Instructor	<a href="mailto:wbrookshear@tntech.edu">wbrookshear@tntech.edu</a> (931)-372-3272	Thermodynamics • Fluid Mechanics • Heat transfer • Automotive Catalysis for Gasoline and Diesel Vehicles
<b>Canfield, Stephen</b> Professor	<a href="mailto:scanfield@tntech.edu">scanfield@tntech.edu</a> (931) 372-6359	Mobile Robots for Inspection • Maintenance and Manufacturing of Mobile Manipulators • Cobot (Collaborative robot) design and applications • Climbing robots • Mechatronics applications in robotics and manufacturing • Robotics for manufacturing • Design of Autonomous and semi-autonomous systems • Vehicle system mobility.
<b>Chen, Pinggen</b> Assistant Professor	<a href="mailto:pchen@tntech.edu">pchen@tntech.edu</a> (931) 372-3310	Modeling • Diagnostics • Controls • Optimizations of automotive systems- conventional/hybrid/electric powertrains, internal combustion engines, and advanced combustion with alternative/renewable fuels
<b>Cui, Jie</b> Assistant Chair and Professor	<a href="mailto:jiecui@tntech.edu">jiecui@tntech.edu</a> (931)-372-3357	Computational Fluid Dynamics • Turbulence Modeling • Large Eddy Simulation • Numerical Heat Transfer • Thermal Fluids
<b>Hill, Tristan</b> Lecturer	<a href="mailto:thill@tntech.edu">thill@tntech.edu</a> (931)-372-3774	Robotics • Programming • Numerical Modeling Analysis • Mechatronics • Dynamics of Machinery
<b>Idem, Stephen</b> Professor	<a href="mailto:sidem@tntech.edu">sidem@tntech.edu</a> (931) 372-3607	Scale model testing • Fluid flow measurement • Thermal modeling • Fluid mechanics • Heat transfer
<b>Languri, Ethan</b> Assistant Professor	<a href="mailto:elanguri@tntech.edu">elanguri@tntech.edu</a> (931) 372-6790	Industrial Energy Efficiency • Combined Heat and Power • Heat Transfer • Numerical Modeling • Energy Storage Systems • Steam Systems • Compressed Air Systems • Flow in Porous Media • Heat Transfer Fluid Enhancement (Nano and Micro Fluids)
<b>Pardue, Sally</b> Associate Professor	<a href="mailto:spardue@tntech.edu">spardue@tntech.edu</a> (931) 372-6169	• Signal processing for system diagnostics and materials characterization • Random vibrations • Modal analysis • Cavitation modeling
<b>Rao, Mohan</b> Chair and Professor	<a href="mailto:mrao@tntech.edu">mrao@tntech.edu</a> (931) 372-3254	Vibrations • Acoustics • Noise control • Damping design • Sound quality • Auditory engineering
<b>Roberts, Rory</b> Associate Professor	<a href="mailto:rroberts@tntech.edu">rroberts@tntech.edu</a> (931) 372-3260	Air breathing propulsion • Aircraft Thermal management • Power systems for aerospace and spaced-based systems • Fuel cells • Electric Propulsion • Hypersonic power and thermal management • Dynamic modeling of multidisciplinary systems • Design and optimization of dynamic systems and control



<b>Sargolzaei, Arman</b> Associate Professor	<a href="mailto:asargolzaei@tntech.edu">asargolzaei@tntech.edu</a> (931) 372-6403	Linear and Nonlinear Control Theory • Security of Networked Control Systems • Safety and Security of Connected and Autonomous Vehicles • Control of Multi-Agent Systems • Cyber-Physical Systems
<b>Slater, Joseph</b> Dean and Professor of Mechanical Engineering	<a href="mailto:jslater@tntech.edu">jslater@tntech.edu</a> (931)-372-3832	Vibration of structures and machines • Aeroelasticity • Linear and Nonlinear System identification • Experimental Modal Analysis • Nonlinear Dynamics • Cyber Physical Systems • Morphing Wing Control • Turbomachinery Blade Vibration
<b>Ting, Kwun-Lon</b> Professor	<a href="mailto:kting@tntech.edu">kting@tntech.edu</a> (931) 372-3230	Mechanism design • Kinematics • Machine design • Gearing • Robotics • Dynamics of machines
<b>Vaselbehagh, Ahmad</b> Assistant Professor	<a href="mailto:avaselbehagh@tntech.edu">avaselbehagh@tntech.edu</a> (931) 372-6468	Wind Power • Water Power • Aerodynamics • Fluid-Structure Interactions • Turbulence • Heat Transfer • Computational Fluid Dynamics
<b>Wilson, Christopher</b> Associate Professor and Chair of General and Basic Engineering	<a href="mailto:chriswilson@tntech.edu">chriswilson@tntech.edu</a> (931) 372-3216	Composite materials testing • Materials properties • Simulation
<b>Zhang, Ying</b> Professor and Director of Center for Manufacturing Research	<a href="mailto:yzhang@tntech.edu">yzhang@tntech.edu</a> (931) 372-3969	High-temperature protective coatings for gas turbine engine applications • Materials synthesis via chemical vapor deposition/pack cementation/electrodeposition • High-temperature oxidation and corrosion
<b>Zhu, Jiahong (John)</b> Professor	<a href="mailto:jzhu@tntech.edu">jzhu@tntech.edu</a> (931) 372-3186	Solid oxide fuel cell • Zn-air batteries • High-temperature alloys • Processing of ceramic • Intermetallic and metallic coatings
<b>CENTER FOR ENERGY SYSTEMS RESEARCH</b>		
<b>NAME      CONTACT INFORMATION      RESEARCH INTERESTS AND EXPERTISE</b>		
<b>Noei, Shirin</b> Research Assistant Professor	<a href="mailto:snoei@tntech.edu">snoei@tntech.edu</a> (931) 372-6546	Connected Autonomous Vehicles • Intelligent Transportation Systems • Networked Control Systems • Cyber-Physical Systems • Traffic Operation

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