The conference is divided into symposia broadly ranging from basic research to applied technological design and development to industrial and governmental integrated system and application demonstrations. The symposia specifically are:

**SYM1: Development and Characterization of Multifunctional Materials**
Chair: Gary Seidel, Virginia Tech
Co-Chairs: Constantin Ciocanucl, N. Arizona TBD, TBD

Topical areas: Material formulations, evaluation, synthesis, and processing; multifunctional composites and hybrid materials; bio-inspired and nano-composites; self-healing materials; novel triggering approaches, including optical, chemical, electrical, and mechanical; material property enhancement; interface and interaction science.

**SYM2: Mechanics & Behavior of Active Materials**
Chair: Jaysimha Atulasimha, VCU
Co-Chairs: Darren Hart, Texas A&M Univ.
Nakhiah Goulbourne, U. of Michigan

Topical areas: Advanced constitutive measurements, micro- and nano-mechanics of actuator & sensor materials, phase field modeling, multi-scale and multi-physics material models, finite element implementations, reliability issues: aging, fatigue, and fracture, materials for energy storage, and multifunctional materials.

**SYM3: Modeling, Simulation and Control of Adaptive Systems**
Chair: S. Nima Mahmoodi, Univ. of Alabama
Co-Chair: Manuel Collet, CNRS
Wael Zak, Khalifa University

Topical areas: Micro and macro level modeling, vibration and acoustic control, passive/semi-active/active damping and stiffness variation, actuation and motion control, intelligent and adaptive control, nonlinear control, hysteresis control, modeling simulation and control of micro/nano systems, nonlinear dynamics, and nonlinear vibration.

**SYM4: Integrated System Design and Implementation**
Chair: Rich Behbo, Dayton Research Inst.
Co-Chair: Jay Gao, GM
Andres Arriesta, Purdue University

Topical areas: Sensors and actuators, power and control electronics, smart devices and technologies, compliant mechanism design, adaptive / intelligent / integrated systems design, smart structures design processes and tools, Industrial and Government smart products and system applications, smart electronics and devices, MEMS.

**SYM5: Structural Health Monitoring**
Chair: Donghyeon Ryu, N.M. Tech
Co-Chairs: Yu Wang, Stony Brook Univ.
Hae Young Noh, Carnegie Mellon

Topical areas: Damage identification & mitigation, sensor networks, data fusion, data mining and management, damage diagnostic and prognostic modeling software, system integration, and applications.

**SYM6: Bioinspired Smart Materials and Systems**
Chair: Eric Freeman, Univ. of Georgia
Co-Chairs: Yash Tummala, S&C Electric
Jovana Johnovana, U. of Skopje

Topical areas: Modeling of biological systems, understanding physical phenomena in biological systems, biomimetic and bio-inspired devices, machines and robotics, utilizing biological systems, smart prosthetic systems and intelligent implant materials and structures.

**SYM7: Energy Harvesting**
Chair: Amit Karum, Univ. of Buffalo
Co-Chairs: Steve Anton, Tennessee Tech
Mostafa Nouh, Univ. of Buffalo

Topical areas: Modeling and experiments of energy harvesting transducers and applied systems using piezoelectric and magnetoelectric materials; electroactive polymers; inductive and capacitive devices, broadband and nonlinear systems; biological, biomedical, aerodynamic, hydrodynamic, and acoustic energy harvesting; MEMS and NEMS configurations; novel circuits and storage devices; novel applications/analysis of traditional transduction (e.g. solar, thermoelectric); energy harvesting using metamaterials.