16th International Symposium on Functionally Graded Materials

FGM2022

Call for Abstract: March 15, 2022

August 7-10 2022

Hartford Marriott Downtown

200 Columbus Blvd
Hartford, CT 06103, USA

Sponsors:
UConn School of Engineering
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Website: https://gradedmaterials2020.engr.uconn.edu
Functionally Graded Materials (FGMs) are characterized by spatially varied microstructures created by non-uniform distributions of material phases with different properties, sizes and shapes. Such multi-phase materials cover a range of space and time scales, and are best understood by means of a multiscale multiphysics approach. These materials have a broad range of applications including biomechanical, aerospace, mechanical, civil, nuclear, and naval engineering.

**General Topics**

**Manufacturing**: Additive manufacturing, Nano-FGMs, Deposition & Casting, etc.

**Design and characterization**: Multifunctional materials, Optimal design of Material Composition, etc.

**Modeling and Simulation**: Multiscale multiphysics modeling, Nano, Micro and Meso-scale Modeling, etc.

**Applications**: Power generation systems, Optical fiber glass, Electromagnetic shielding materials, etc.

**Mini-Symposium (MS)**

Graded Architecture and Processing, FGMs for Battery Packaging; Multifunctional Surface Materials for Sustainable Infrastructure; Mesoscopic Phenomena of Functionally and Compositionally Graded Materials; Thermoelectric Materials; Design of Architected Materials; Metamaterials, and Programmable Structures; Modeling of Multiscale and FGMs; Fracture and Contact Mechanics of FGMs; Biomaterials and Interfaces; Manufacturing Simulation; Hazard Vulnerability, Performance Assessment, and Risk Reduction of Coastal Structures; Structural Health Monitoring and its Applications; Data-driven Modeling and Design of Functionally Graded Materials; Structural Materials and Mechanics, Responsive & Architected Functional Materials, etc.