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

Website: https://gradedmaterials2020.engr.uconn.edu

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Programs

August 7
Registration
August 8
Plenary Lecture 1
(Prof. R. Hebert)
Oral sessions
Poster session
Banquet
August 9
Plenary Lecture 2
(Prof. J. E. Andrade)
Oral sessions

August 10
Plenary Lecture 3
(Dr. S. Yoshikazu)
Oral sessions
Tour: UConn IPB & Ice cream

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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)
Additive Manufacturing; Thin Films and Coatings;
Multifunctional Surface Materials for Sustainable Infrastructure; Mesoscopic Phenomena of Functionally and Compositionally Graded Materials; Thermoelectric Materials; Design of Architectured 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; Structural Materials and Mechanics, etc.