

# 16<sup>th</sup> International Symposium on Functionally Graded Materials

## FGM2020



August 9-12

# 2020

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**200 Columbus Blvd  
Hartford, CT 06103, USA**

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

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## Local Technical Committee (UConn):

Prof. Dianyuan Zhang

Prof. Osama R. Bilal

Prof. Wei Zhang

Prof. Shinae Jang

# Programs

**August 9**

*Registration*

**August 10**

*Plenary Lecture 1  
(Prof. R. Hebert)*

*Oral sessions*

*Poster session*

*Banquet*

**August 11**

*Plenary Lecture 2  
(Prof. J. E. Andrade)*

*Oral sessions*

**August 12**

*Plenary Lecture 3  
(Dr. S. Yoshikazu)*

*Oral sessions*

*Tour: UConn IPB &  
Ice cream*

# IACFGM Advisory Committee

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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 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; Structural Materials and Mechanics, etc.