16th International Symposium on Functionally Graded Materials

FGM 2020

August 9-12, 2020

Sponsors:
UConn School of Engineering
UConn Innovation Partnership Building
Connecticut Manufacturing Simulation Center
P&W Additive Manufacturing Center
UConn SHAP3D Center
Aero Gear Inc.
Barnes Group Inc.

Hartford Marriott
Downtown
200 Columbus Blvd
Hartford, CT 06103, USA

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

Conference Chairman
Prof. Jeongho Kim, University of Connecticut

Co-chairs:
Prof. Alok Sutradhar, Ohio State University
Prof. Huiming Yin, Columbia university
Prof. Yu Zhang, New York University
Prof. Marek Pindera, University of Virginia
Prof. Glauco H. Paulino, Georgia Tech

Local Technical Committee (UConn):
Prof. Dianyun 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

Chair: Prof. Akira Kawasaki
USA
Prof. Glauco H. Paulino
Prof. Marek-Jerzy Pindera
Prof. Jeongho Kim
Prof. Huiming Yin

GERMANY
Prof. Thorsten Gerdes

FRANCE
Prof. Jean-François Silvain

BELGIUM
Prof. Omer Van Der Biest

FINLAND
Prof. Michael M. Gasik

RUSSIA
Prof. Evgeny Levashov
Dr. Vladimir Sanin

TURKEY
Prof. Serkan Dag

BRAZIL
Prof. Fernando A. Rochinha
Prof. Emilo C.N.Silva
Prof. Luis Augusto Rocha

Emeritus members
Prof. Wolfgang G.J. Bunk
Prof. Fazil Erdogan

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.