

# **Call for Papers**

## **Optimization for Integrated Computational Materials Engineering (ICME)**

**AIAA SciTech 2017, home of the  
58th AIAA/ASME/ASCE/AHS/ASC Structures, Structural Dynamics, and Materials Conference  
January 9-13, 2017  
Gaylord Texan Resort & Convention Center  
Grapevine, Texas**

The AIAA (American Institute of Aeronautics and Astronautics) Multidisciplinary Design Optimization Technical Committee (MDO TC) is very pleased to announce a call for papers to be presented in a series of special sessions on **Integrated Computational Materials Engineering (ICME)** within the AIAA SciTech conference. ICME initiatives focus on the integration of materials information, captured in computational tools, with engineering product performance analysis and manufacturing process simulation (references: [NAP 2008](#), [NSTC 2011](#)). The coordinated efforts of ICME and the Materials Genome Initiative (MGI) aim to deliver the required infrastructure and training to accelerate innovation, discovery, development, validation and use of advanced materials and manufacturing processes as an integral part of next generation multi-disciplinary design/make with a focus on designing for affordability. The presentations addressed in this symposium are affiliated and compliments the efforts of ASM International ([AeroMat](#) & [Computational Materials Data Network](#)), [TMS](#), [ASME](#) and SciTech short courses for ICME.

To this end, the MDO TC is soliciting papers with recent research, technological advancements, and systems level perspectives that address issues/challenges involved utilization of computational methods in optimization and design over multiple length scales from “processing” to “performance”, with emphasis on structural performance. The end goal of the session is to identify challenges and solutions involving computational optimization and design, which will facilitate successful implementation of ICME concepts in industry and research labs and reduce lead time to products. The committee welcomes submissions from government, industry, academic, and small businesses.

**Abstracts of no less than 1,000 words due June 7, 2016**  
**Author notification of paper acceptance in August, 2016**  
**Final paper due December 6, 2016**  
Abstracts must be submitted online at:  
<http://www.aiaa-scitech.org/>

**Make sure to select the “ICME” abstract topic option when prompted during submission**  
Please notify us if you are planning to submit an abstract so that we can ensure that it is included in these sessions.  
Please also include the line “For ICME Special Sessions” above the title of your extended abstract. For more information contact one of the following organizers:

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