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THE WORLD COMES HERE TMS 2020 149<sup>th</sup> Annual Meeting & Exhibition

February 23-27, 2020 · San Diego, California, USA

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## Nanostructured and Heterostructured Materials

# Nanocomposites VI: Nanoscience and Nanotechnology in Advanced Composites

This symposium, the sixth in a series, attempts to bring together engineers, scientists, scholars, researchers and even entrepreneurs to present and discuss their novel and innovative contributions in the domain specific to nanocomposites, specifically on aspects both related and relevant to the following: (i) science at the level of nanoscale, (ii) processing: innovations and advances, (iii) characterization, quantification and analysis, (iv) mechanical property evaluation and rationalizations, quantification, (v) failure analysis, and far-reaching (v) technological applications at the level of nano-scale.

We are looking for new or novel techniques and/or approaches that have been developed to help us promote the use of composite materials in a spectrum of both performance-critical and non-performance-critical applications at the level of nanoscale. The goal of this inter-disciplinary symposium is to bring together the range of developments in the domains spanning basic science, processing, analysis, characterization, mechanical property evaluation and failure analysis rationalization of the family of composite materials, as an attractive choice for selection and use in both existing and emerging applications. The family of composites span the entire spectrum of metals to include the intermetallic. The conference will certainly provide an attractive forum for presenting recent advances on aspects related to materials processing, fabrication, characterization, modeling, failure analysis and observations by way of interpretations by scientists, researchers and engineers working in industry, national research laboratories, and academia. Key-Note, Invited and Contributed talks will be included. The Key-Note and Invited papers from leading edge academic and industrial research settings will provide a lucid and comprehensive overview of the "current" status and potential future directions for both research and technology-relevant applications. Contributed papers will attempt to cover specific problems in the same areas.

The topics of interest include the following:

- Nanoscale Metal-matrix composites
- Nanoscale Ceramic-matrix composites
- Nano-scale Intermetallic-based composites

Where possible contributions in the above topics should relate to applications, purely at the nanoscale level, in the areas spanning: (i) Aerospace, (ii) Automotive, (iii) Bio-medical and Healthcare, (iv) Electronic goods, and (v) Energy-relevant

### ORGANIZERS

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#### SYMPOSIUM SPONSORS

TMS Structural Materials Division TMS Composite Materials Committee

Abstract Deadline is July 1, 2019. Submit online at www.programmaster.org/TMS2020.

Questions? Contact programming@tms.org