TO: Members of ASTM Committees E08, E28, D30, C28, F08 and F42

CALL FOR PAPERS ANNOUNCEMENT

19th International ASTM/ESIS Symposium on Fatigue and Fracture Mechanics (42nd National Symposium on Fatigue and Fracture Mechanics)
May 15-17, 2019
Denver, CO

ABOUT THE EVENT

Papers are invited for the 19th International ASTM/ESIS Symposium on Fatigue and Fracture Mechanics (42nd National Symposium on Fatigue and Fracture Mechanics). Co-sponsored by ASTM Internationals Committee E08 on Fatigue and Fracture and the European Structural Integrity Society (ESIS), the symposium will be held May 15-17, 2019 at the Sheraton Denver Downtown Hotel in Denver, CO in conjunction with the May standards development meetings of ASTM Committee E08.

OBJECTIVE AND SCOPE

Fatigue and fracture behaviors of engineered components are of interest today across an increasingly broad spectrum of communities ranging from aerospace, surface transportation, power generation, and petroleum to the semiconductor, biomedical, and micro-electro-mechanical systems (MEMS) worlds. Each of these areas presents its own challenges to the development and application of engineering approaches to predict, optimize and manage structural integrity and remaining life of critical systems. The required fatigue and fracture methodologies depend upon robust and accurate models of the damage formation, damage accumulation and failure mechanisms that operate within each of these domains, as well as an accurate characterization of the material response to the combined effects of loading, loading rate, environmental conditions, and engineered or naturally-occurring material heterogeneity. These challenges are further complicated by the increasing use of new materials and manufacturing technologies.

This symposium is intended to be a forum for exchange of ideas, test methods, data, and analysis methods across a broad range of fatigue and fracture mechanics topics, materials, and engineered components, including metallic materials, composite and hybrid materials, hybrid fiber metal laminates, and additively manufactured components. Additional focus is also set on polymers and polymer matrix composites, which are gaining more and more relevance in structural applications. Topics may include basic research into fracture mechanisms characterization of fracture and fatigue related properties and efforts to develop new standards, application of principles, theories and material properties to analysis of structural integrity, influence of material anisotropy on fracture and fatigue behavior, and applicability of existing standards to new materials.

Deadline to submit abstracts is August 31, 2018.

For more information regarding this symposium and abstract submittal please visit http://www.astm.org/ASTM-ESISCFP2019.

Thank you,
ASTM Symposia Operations