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ICMFF13

13th International Conference on Multiaxial Fatigue and Fracture

May 18-20, 2022
Hyatt Regency
Seattle, WA

www.astm.org/E08ICMFF13ConfCFPMay2022

Foreword

Abstracts are invited for the 13th International Conference on Multiaxial Fatigue and Fracture (ICMFF13) to be held May 18-20, 2022. The objective of this conference is to share the latest international research developments in the field of multiaxial fatigue and fracture. Though commonly encountered in applications, multiaxial stress states are typically studied in the laboratory only in a limited way. Persistent limitations in understanding of mechanisms and design methodologies for multiaxial fatigue continue to place this subject on the forefront of research, spanning experiments, modeling and simulation, applications, and design. This event will mark the 40th anniversary of the first Symposium on Multiaxial Fatigue sponsored by ASTM and held in San Francisco December 15-17, 1982.

Conference Venue

Sponsored by ASTM Committee E08 on Fatigue and Fracture, ICMFF13 will be held at the Hyatt Regency in Seattle, WA in conjunction with the May standards development meetings of the committee.

A seaport on the West Coast of the United States, Seattle is the largest city in both the state of Washington and the Pacific Northwest region of North America. It has a population of about 4 million and is home to major technology companies like Microsoft, Boeing, and Amazon.

Abstract Topics

Topics include, but are not limited to, studies involving:

- Cyclic deformation under multiaxial loading, including load history effects
- Fatigue crack formation and early growth processes, mechanisms, and models
- Mixed-mode fatigue crack growth, including small fatigue cracks
- Advances in understanding of multiaxial fatigue offered by in situ experimental techniques, coupling of theory and experiments, microstructure-sensitive computational simulations, and/or data science
- Multiaxial fatigue design issues including notches, variable amplitude loading, contact and fretting, residual stress effects, and case studies
- Environmental effects including multiaxial thermal fatigue and coupling with creep phenomena

Abstract Submittal

To participate in the conference, authors must submit a two to three-page abstract using the online Abstract Submittal Form **no later than September 30, 2021**.

The Conference Chairs will notify the authors via email by **November 30, 2021** of the paper's acceptability for presentation at the conference.

For more information about the conference, please visit: www.astm.org/E08ICMFF13ConfCFPMay2022

More information

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Publication

Based on the technical quality and topical nature of the abstracts, presenters may be contacted after the conference to submit a full paper for consideration in one of several planned special issues of journals. You will be notified by **June 30, 2022**, if the Editors would like you to submit a full paper for a special issue. The journals include ASTM's *Materials Performance and Characterization (MPC), International Journal of Fatigue,* and *Theoretical and Applied Fracture Mechanics.* The Editor of ASTM's MPC will coordinate with the ICMFF13 Co-Chairs regarding placement of papers into each journal according to topical theme. Papers will be peer reviewed prior to publication in any special issue.

Conference Chairs

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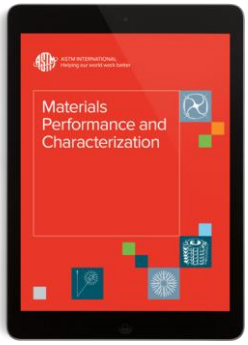

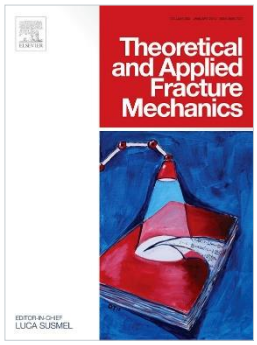

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