

Second Circular



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15th International Conference on Fracture Atlanta, Georgia, USA

June 13-18, 2021



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October 1, 2020: Abstract for oral presentation submission deadline

Dec. 1, 2020: Acceptance of Abs.

March 31, 2021: Deadline for early conference registration

April 30, 2021: Deadline for submission of full papers for publication in special issues of archived journals/conference proceedings (optional)

Current Sponsors



Conference Topics

- Fracture & fatigue of advanced materials
- Failure mechanisms
- Fracture & fatigue of MEMS and NEMS
- Failure of nanodevices
- Fracture at atomistic & molecular scale
- Fracture & fatigue of thin films
- Failure of nanocomposites
- Physics of fracture
- Brittle fracture
- Ductile fracture
- High temperature creep fracture
- Fretting fatigue
- Thermal-mechanical fatigue
- Stress corrosion & corrosion fatigue
- Environment assisted fracture
- Fracture in ceramics
- Fracture in polymers
- Test methods in fracture
- Nonlinear & linear fracture mechanics
- Computational fracture mechanics
- Residual stress in fatigue and fracture
- Nondestructive testing for fracture prevention
- Fracture in biological materials
- Cracks in geological systems
- Mixed mode fracture
- Structural integrity assessments
- Probabilistic fracture mechanics
- Smart materials & structures
- Fracture in structural foams
- Dynamic & high strain rate fracture
- Fracture in weldments
- Damage mechanics

Conference Venues Georgia World Congress Center, Downtown, Atlanta, GA



Omni Atlanta Hotel, CNN Center



Budget housing available in nearby Georgia Tech dormitory

Sponsorship Opportunities

Opportunities are available for corporations, foundations, test equipment manufacturers, publishing houses, and government agencies to support ICF15. Funds will be used to attract internationally renowned scholars to the conference, for supporting networking receptions, best student poster awards, best paper awards, and participation of young scientists and graduate students. For more information on sponsorship opportunities, please contact:

Prof. Ashok Saxena, Executive Chair, asaxena@uark.edu

Cherie Rachel, clrachel@uark.edu

Program Highlights – ICF15 Atlanta, June 13-18, 2021



The program will consist of the following:

- 21 Topical Symposia on listed topics
- ICF Opening Honor Lecture
- Plenary Lectures
- ICF Presidential Lecture
- ICF Closing Honor Lecture
- Keynote Presentations
- Contributed Papers
- Poster Sessions

Atlanta has several tourist attractions in the downtown and nearby areas and has a public transportation system that connects different parts of the metropolitan area. An exciting program for family members accompanying ICF15 delegates is being planned.

Symposium Topic	Organizers	Symposium Topic	Organizers	Symposium Topic	Organizers
High-Temperature Creep, Fatigue, and Creep-Fatigue in Power Generation Components	Jonathan Parker jparker@epri.com John Shingledecker, S. Narasimhachary Catrin Davies	Microstructures and Fracture in Multiferroic Materials	Tong-Yi Zhang zhangty@shu.edu.cn Chad Landis, Weiqiu Chen, Ralf Müller, Jie Wang	Phase-Field Models of Fracture	Blaise Bourdin bouardin@lsu.edu Corrado, Maurini Marco Paggi, José Reinoso
Ductile Fracture Under Complex Loading	David Wilkinson wilkinso@mcmaster.ca Thomas Pardoen Amine Benzerga	Fracture in Large Scale Metallic Infrastructure: Advances, Challenges, and Opportunities	Amit Kanvinde kanvinde@ucdavis.edu Xudong Qian	Failure Mechanisms in Advanced Materials and Structures	Zengtao Chen Minghao Zhao Cunfa Gao
JoDean Morrow and Paul Paris Honorary Symposium on Fatigue and Fracture	Huseyin Sehitoglu huseyin@uiuc.edu Petros Sofronis John Landes	Beyond Similitude: Role of Multiscale Heterogeneity in Fracture Prognosis	Ashley Spear ashley.spear@utah.edu Gustavo Castelluccio	Probabilistic Aspects of Fatigue Crack Growth and Fracture: Frameworks, Tools, and Applications	R. Craig McClung craig.mcclung@swri.org James C. Sobotka Kai Kadau
Fracto-emissions in Structural and Seismic Monitoring	Alberto Carpinteri alberto.carpinteri@polito.it Giuseppe Lacidogna Oscar Borla	Mechanical Failure of Lithium-ion Batteries: from Material to Structure	Juner Zhu zhujuner@mit.edu Junhe Lian, Kejie Zhao Tomasz Wierzbicki	Advanced Computational Methods for Fracture	P.R. Budarapu pattabhi@iitbbs.ac.in M.K. Pandit A.K. Pradhan S. Natarajan T. Rabczuk
Brittle Fracture: 100 years After Publication of Griffith's Theory	Claudio Ruggieri claudio.ruggieri@usp.br Laszlo Toth	Fatigue and Fracture of AM Materials	Bo Chen bo.chen@leicester.ac.uk N. Iyer, Filippo Berto	Residual Stress in Fatigue and Fracture	Michael R. Hill mrhill@ucdavis.edu Thomas J. Spradlin, Dale L. Ball
Hydrogen Embrittlement and Environmentally Assisted Cracking	Jesus Toribio toribio@usal.es Chris San Marchi Joseph Ronevich	Small Scale Specimen Testing	Vikram Jayaram gjayaram@iisc.ac.in Raghu V. Prakash, N Jaya Balila, Robert Lancaster, Bernd Gludovatz, Dan Gianola	50+ Years of Fracture Mechanics: A Symposium to Honor James R. Rice and John W. Hutchinson	John L. Bassani bassani@seas.upenn.edu Zhigang Suo Nadia Lapusta
Data Analytics, Machine Learning and their Role in Predicting Mechanical Behavior and Fracture	Markus Buehler mbuehler@mit.edu Arun Nair	Finite Fracture Mechanics: Theoretical Aspects, Numerical Procedures and Experimental Applications	Vladislav Mantič mantic@us.es Pietro Cornetti, Dominique Leguillon Pedro Camanho		



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