

15th International Conference on Fracture – Program Agenda

Omni Atlanta Hotel at CNN Center North Tower, unless otherwise specified

Sunday, June 11, 2023

14:30 – 20:00 Conference Registration Desk Open (next to Grand Ballroom)

18:00 – 20:00 Welcome Reception (Grand Ballroom Lobby)

All registered participants and registered accompanying persons invited to attend.

Monday, June 12, 2023

7:00 – 17:00 Conference Registration Desk Open (next to Grand Ballroom)

8:00 – 8:30 Conference Opening Session (Grand Ballroom E)

8:00	Welcome	Ashok Saxena, Conference Chair
8:15	Greetings from ICF President	Robert McMeeking
8:20	Announcements	Richard Neu and Christopher Muhlstein

8:30 – 10:00 Plenary Session P1 (Grand Ballroom E) Ashok Saxena, Session Chair

8:30	ICF Opening Honor Lecture	David McDowell
9:10	Presentation of the Paul Paris Gold Medal to David McDowell by Ashok Saxena	
9:20	Plenary Lecture	Subra Suresh

10:00 – 10:30 Coffee Break (Grand Ballroom Lobby)

10:30 – 12:30 Parallel Session M1

Symposium 1: Ductile Fracture Under Complex Loading (Grand Ballroom A)
 Symposium 2: JoDean Morrow and Paul Paris Memorial Symposium on Fatigue and Fracture (Grand Ballroom B)
 Symposium 3: Fracto-emissions in Structural and Seismic Monitoring (Grand Ballroom C)
 Symposium 13: Failure Mechanisms in Advanced Materials and Structures (Dogwood A)
 Symposium 14: Probabilistic Aspects of Fatigue Crack Growth and Fracture: Frameworks, Tools, and Applications (Dogwood B)
 Symposium 19: Failure Analysis and Prevention (Chestnut)
 Symposium 21: Fracture in Polymer-based Materials: Structure-Property Relationships (Hazelnut)

12:30 – 14:00 Lunch (South Tower Atrium Terrace)

14:00 – 16:00 Parallel Session M2

Symposium 1: Ductile Fracture Under Complex Loading (Grand Ballroom A)
 Symposium 2: JoDean Morrow and Paul Paris Memorial Symposium on Fatigue and Fracture (Grand Ballroom B)
 Symposium 3: Fracto-emissions in Structural and Seismic Monitoring (Grand Ballroom C)
 Symposium 13: Failure Mechanisms in Advanced Materials and Structures (Dogwood A)
 Symposium 14: Probabilistic Aspects of Fatigue Crack Growth and Fracture: Frameworks, Tools, and Applications (Dogwood B)
 Symposium 19: Failure Analysis and Prevention (Chestnut)
 Symposium 20: Materials Data in Assessment of Components Operating in Extreme Environments (Walnut)
 Symposium 21: Fracture in Polymer-based Materials: Structure-Property Relationships (Hazelnut)

16:00 – 16:30 Coffee Break (Grand Ballroom Lobby)

16:30 – 18:00 Parallel Session M3

Symposium 2: JoDean Morrow and Paul Paris Memorial Symposium on Fatigue and Fracture (Grand Ballroom B)

Symposium 3: Fracto-emissions in Structural and Seismic Monitoring (Grand Ballroom C)

Symposium 13: Failure Mechanisms in Advanced Materials and Structures (Dogwood A)

Symposium 14: Probabilistic Aspects of Fatigue Crack Growth and Fracture: Frameworks, Tools, and Applications (Dogwood B)

Symposium 16: Residual Stress in Fatigue and Fracture (Hickory)

Symposium 20: Materials Data in Assessment of Components Operating in Extreme Environments (Walnut)

18:00 – 19:00 Exhibition opens (Grand Ballroom D)**19:00 – 20:00 ICF Executive Committee Meeting (Grand Ballroom A)****Tuesday, June 13, 2023****7:00 – 17:00 Conference Registration Desk Open (next to Grand Ballroom)****8:30 – 10:00 Plenary Session P2 (Grand Ballroom E) Robert McMeeking, Session Chair**

8:30 Plenary Lecture David Wilkinson

9:10 Plenary Lecture William Curtin

9:50 Presentation of George Irwin Medal to William Curtin by Robert McMeeking

10:00 – 10:30 Coffee Break (Grand Ballroom Lobby)**10:30 – 12:30 Parallel Session Tu1**

Symposium 1: Ductile Fracture Under Complex Loading (Grand Ballroom A)

Symposium 2: JoDean Morrow and Paul Paris Memorial Symposium on Fatigue and Fracture (Grand Ballroom B)

Symposium 5: Hydrogen Embrittlement & Environmentally Assisted Cracking (Grand Ballroom C)

Symposium 8: Beyond Similitude: Role of Multiscale Heterogeneity in Fracture Prognosis (Walnut)

Symposium 9: Fatigue and Fracture of Additively Manufactured Materials (Grand Ballroom E)

Symposium 11: Finite Fracture Mechanics: Theoretical Aspects, Numerical Procedures, and Experimental Applications (Dogwood B)

Symposium 13: Failure Mechanisms in Advanced Materials and Structures (Dogwood A)

Symposium 16: Residual Stress in Fatigue and Fracture (Hickory)

Symposium 21: Fracture in Polymer-based Materials: Structure-Property Relationships (Hazelnut)

12:30 – 14:00 Lunch (South Tower Atrium Terrace)**14:00 – 16:00 Parallel Session Tu2**

Symposium 1: Ductile Fracture Under Complex Loading (Grand Ballroom A)

Symposium 2: JoDean Morrow and Paul Paris Memorial Symposium on Fatigue and Fracture (Grand Ballroom B)

Symposium 5: Hydrogen Embrittlement & Environmentally Assisted Cracking (Grand Ballroom C)

Symposium 8: Beyond Similitude: Role of Multiscale Heterogeneity in Fracture Prognosis (Walnut)

Symposium 9: Fatigue and Fracture of Additively Manufactured Materials (Grand Ballroom E)

Symposium 11: Finite Fracture Mechanics: Theoretical Aspects, Numerical Procedures, and Experimental Applications (Dogwood B)

Symposium 16: Residual Stress in Fatigue and Fracture (Hickory)

Symposium 21: Fracture in Polymer-based Materials: Structure-Property Relationships (Hazelnut)

16:00 – 16:30 Coffee Break (Grand Ballroom Lobby)**16:30 – 18:00 Plenary Session P3 (Grand Ballroom E)****David McDowell, Session Chair**

16:30 Plenary Lecture

Huseyin Sehitoglu

17:10 Plenary Lecture

Norman Fleck

17:50 Presentation of the Paul Paris Gold Medal to Huseyin Sehitoglu by David McDowell

Presentation of the George Irwin Gold Medal to Norman Fleck by David McDowell

Presentation of the Alan Cottrell Gold Medal to Anthony J. Kinloch (received by Norman Fleck)

18:00 – 19:00 Poster Session (Grand Ballroom D)*Exhibition open***19:00 – 20:00 Memorial Session (Grand Ballroom A)****Alberto Carpinteri, Organizer**

In remembrance of Takeo Yokobori, David Taplin, John Knott, and Robert Goldstein

Wednesday, June 14, 2023**7:00 – 17:00 Conference Registration Desk Open (next to Grand Ballroom)****8:30 – 10:00 Plenary Session P4 (Grand Ballroom E)****Richard Neu, Session Chair**

8:30 Presidential Lecture

Robert McMeeking

9:15 Plenary Lecture

Tong-Yi Zhang

9:55 Presentation of the Honorary Fellow Award to Robert McMeeking by Richard Neu

10:00 – 10:30 Coffee Break (Grand Ballroom Lobby)**10:30 – 12:30 Parallel Session W1**

Symposium 1: Ductile Fracture Under Complex Loading (Grand Ballroom A)

Symposium 2: JoDean Morrow and Paul Paris Memorial Symposium on Fatigue and Fracture (Grand Ballroom B)

Symposium 5: Hydrogen Embrittlement & Environmentally Assisted Cracking (Grand Ballroom C)

Symposium 7: Fracture in Large Scale Metallic Infrastructure: Advances, Challenges, and Opportunities (Dogwood A)

Symposium 8: Beyond Similitude: Role of Multiscale Heterogeneity in Fracture Prognosis (Walnut)

Symposium 9: Fatigue and Fracture of Additively Manufactured Materials (Grand Ballroom E)

Symposium 11: Finite Fracture Mechanics: Theoretical Aspects, Numerical Procedures, and Experimental Applications (Dogwood B)

Symposium 15: Advanced Computational Methods in Fracture (Hickory)

12:30 – 14:00 Lunch (South Tower Atrium Terrace)**14:00 – 16:00 Parallel Session W2**

Symposium 5: Hydrogen Embrittlement & Environmentally Assisted Cracking (Grand Ballroom C)

Symposium 6: Microstructures and Fracture in Advanced Materials (Grand Ballroom A)

Symposium 7: Fracture in Large Scale Metallic Infrastructure: Advances, Challenges, and Opportunities (Dogwood A)

Symposium 8: Beyond Similitude: Role of Multiscale Heterogeneity in Fracture Prognosis (Walnut)

Symposium 9: Fatigue and Fracture of Additively Manufactured Materials (Grand Ballroom E)

Symposium 11: Finite Fracture Mechanics: Theoretical Aspects, Numerical Procedures, and Experimental Applications (Dogwood B)

Symposium 15: Advanced Computational Methods in Fracture (Hickory)

Symposium 17: Damage, Fracture, and Fatigue of Composites (Chestnut)

16:00 – 16:30 Coffee Break (Grand Ballroom Lobby)

16:30 – 18:00 Parallel Session W3

Symposium 5: Hydrogen Embrittlement & Environmentally Assisted Cracking (Grand Ballroom C)

Symposium 6: Microstructures and Fracture in Advanced Materials (Grand Ballroom A)

Symposium 7: Fracture in Large Scale Metallic Infrastructure: Advances, Challenges, and Opportunities (Dogwood A)

Symposium 10: Small Scale Specimen Testing (Grand Ballroom B)

Symposium 15: Advanced Computational Methods in Fracture (Hickory)

Symposium 17: Damage, Fracture, and Fatigue of Composites (Chestnut)

18:00 – 19:00 NSF Sponsored Mixer for junior and senior researchers (Grand Ballroom D)

Poster session and exhibition open

19:00 – 20:00 ICF Council meeting (Grand Ballroom A)

Open to all country delegate leaders/alternates

Thursday, June 15, 2023

7:00 – 17:00 Conference Registration Desk Open (next to Grand Ballroom)

8:30 – 10:00 Plenary Session P5 (Grand Ballroom E)

K. Ravi-Chandar, Session Chair

8:30 Plenary Lecture

A.T. Yokobori

9:15 Plenary Lecture

Claudio Ruggieri

10:00 – 10:30 Coffee Break (Grand Ballroom Lobby)

10:30 – 12:30 Parallel Session Th1

Symposium 4: Brittle Fracture: 100 years After Publication of Griffith's Theory (Grand Ballroom C)

Symposium 6: Microstructures and Fracture in Advanced Materials (Grand Ballroom A)

Symposium 7: Fracture in Large Scale Metallic Infrastructure: Advances, Challenges, and Opportunities (Dogwood A)

Symposium 9: Fatigue and Fracture of Additively Manufactured Materials (Grand Ballroom E)

Symposium 10: Small Scale Specimen Testing (Grand Ballroom B)

Symposium 12: Phase-Field Models of Fracture (Dogwood B)

Symposium 15: Advanced Computational Methods in Fracture (Hickory)

Symposium 18: Mechanical Behavior in Nuclear Materials (Walnut)

12:30 – 14:00 Lunch (South Tower Atrium Terrace)

14:00 – 16:00 Parallel Session Th2

Symposium 4: Brittle Fracture: 100 years After Publication of Griffith's Theory (Grand Ballroom C)

Symposium 6: Microstructures and Fracture in Advanced Materials (Grand Ballroom A)

Symposium 7: Fracture in Large Scale Metallic Infrastructure: Advances, Challenges, and Opportunities (Dogwood A)

Symposium 9: Fatigue and Fracture of Additively Manufactured Materials (Grand Ballroom E)

Symposium 10: Small Scale Specimen Testing (Grand Ballroom B)

Symposium 12: Phase-Field Models of Fracture (Dogwood B)

Symposium 15: Advanced Computational Methods in Fracture (Hickory)

Symposium 17: Damage, Fracture, and Fatigue of Composites (Chestnut)

Symposium 18: Mechanical Behavior in Nuclear Materials (Walnut)

16:00 – 16:30 Coffee Break (Grand Ballroom Lobby)

16:30 – 18:00 Parallel Session Th3

Symposium 4: Brittle Fracture: 100 years After Publication of Griffith's Theory (Grand Ballroom C)

Symposium 6: Microstructures and Fracture in Advanced Materials (Grand Ballroom A)

Symposium 7: Fracture in Large Scale Metallic Infrastructure: Advances, Challenges, and Opportunities (Dogwood A)

Symposium 10: Small Scale Specimen Testing (Grand Ballroom B)

Symposium 17: Damage, Fracture, and Fatigue of Composites (Chestnut)

Symposium 18: Mechanical Behavior in Nuclear Materials (Walnut)

**18:00 – 19:00 ICF Executive Committee Meeting #2 (Grand Ballroom A)
Exhibition Closes (Grand Ballroom D)****19:00 – 21:30 Conference Banquet (Grand Ballroom E)***Tickets required for admission.**Join us for drinks, dinner, brief remarks, and presentation of awards.*

Constance Tipper Silver Medal: Filippo Berto, Dong Liu, Ashley Spear

ICF Honorary Fellows: Yukitaka Murakami, L.R. Francis Rose

Paul Paris Gold Medal: Shiro Kubo

Takeo Yokobori Gold Medal: Shouwen Yu, Krishnaswamy Ravi-Chandar

George Irwin Gold Medal: Huajian Gao

Friday, June 16, 2023**8:30 – 10:00 Plenary Session P6 (Grand Ballroom E) Richard Neu, Session Chair**

8:30 Plenary Lecture

Sylvie Pommier

9:10 Plenary Lecture

R. Narasimhan

9:50 Presentation of the Alan Cottrell Gold Medal to R. Narasimhan by Richard Neu

10:00 – 10:30 Coffee Break (Grand Ballroom Lobby)**10:30 – 12:30 Parallel Session F1**

Symposium 4: Brittle Fracture: 100 years After Publication of Griffith's Theory (Grand Ballroom C)

Symposium 6: Microstructures and Fracture in Advanced Materials (Grand Ballroom A)

Symposium 9: Fatigue and Fracture of Additively Manufactured Materials (Grand Ballroom E)

Symposium 10: Small Scale Specimen Testing (Grand Ballroom B)

Symposium 12: Phase-Field Models of Fracture (Dogwood B)

Symposium 17: Damage, Fracture, and Fatigue of Composites (Chestnut)

Symposium 18: Mechanical Behavior in Nuclear Materials (Walnut)

12:30 – 14:00 Lunch (South Tower Atrium Terrace)**14:00 – 15:30 ICF15 Closing Session (Grand Ballroom E) Christopher Muhlstein, Session Chair**

14:00 Address by Incoming ICF President

TBA

14:10 Student Awards Presentation

Christopher Muhlstein

14:40 ICF Closing Honor Lecture

Robert O. Ritchie

15:20 Conference Closing Remarks

Richard Neu