Second Announcement and Call for Papers



13th International Conference on Fracture (ICF13)

June 16–21, 2013 Beijing, China

http://www.icf13.org







WELCOME

Dear Colleagues:

On behalf of the Organizing Committee of ICF13, I am very pleased to announce the 13th International Conference on Fracture, to be held in Beijing, China on June 16–21, 2013.



Beijing has served as a capital of the country for more than 800 years. It is not only the nation's cultural, scientific and educational heart but also a key transportation hub. The city has many places of historic interest and scenic beauty, including the Forbidden City, the Temple of Heaven, the Summer Palace, the Ming Tombs, and the world-renowned and genuinely inspiring Great Wall. Large-scale construction has brought great changes to Beijing since the founding of the People's Republic of China in 1949, adding more and more new attractions to the mysterious old city. In recent years, Beijing has experienced a rapid development and has become a modern international metropolis. The great success of 2008 Olympics has proved the competence of Beijing as a good choice for holding international events.

ICF13 will take place in the heart of the Olympic Green. The venue has more than 70 meeting rooms of various sizes equipped with advanced AV facilities. The plenary hall is able to cater for all delegates.

In ICF13, about 60 sessions and mini-symposiums will be organized, which include not only traditional and fundamental topics but also exciting and edge-cutting developments. The scientific program involves Opening and Closing Honour Lectures and ICF President's Honour Lecture. A number of plenary and keynote lectures will also be delivered by leading scientists in fracture and relevant fields.

I believe that you will find this conference to be a memorable and successful event. ICF13 will not only be a grand meeting for academic exchange and international cooperation, but will also provide you a good opportunity to appreciate the enchanting natural scenery and historic and modern cultures in Beijing. I hope that you will also have an opportunity to visit other beautiful places and cities of China during your post-conference tours.

I kindly invite you to present at this important conference and I am looking forward to meeting you at Beijing in June 2013.

With best wishes.

Sincerely yours

Shouwen Yu ICF13 Chairman

INTERNATIONAL CONGRESS ON FRACTURE

Founded by Professor T. Yokobori in 1965, the International Congress on Fracture (ICF) is now the premier international body for promotion of industrial, experimental & theoretical research, education and worldwide cooperation among scientists and engineers concerned with mechanics and mechanisms of fracture, fatigue and structural integrity of materials, components and systems.

Over the decades, ICF has made considerable progress in providing an opportunity for highlighting individual and national accomplishments in a wide range of disciplines beyond the traditional arenas—from biomedicine to geophysics, from nano/atomic to macro scales, and from physical to holistic and system modeling.

EXECUTIVE OFFICERS 2009–2013

Founder President	T. Yokobori (Japan)		
President	Al. Carpinteri (Italy)		
Senior Vice-President	S. W. Yu (China)		
Vice-Presidents	M. ElBoujdaini (Canada)		
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	M. J. Hoffman (Australia)		
Secretary-General	T. Yokobori, Jr. (Japan)		
Treasurer/Liaison Officer	D. M. R. Taplin (UK)		





PREVIOUS CONFERENCES

ICF-1	Sendai (Japan)	1965	ICF-7 Houston (USA) 1989
ICF-2	Brighton (UK)	1969	ICF-8 Kiev (Ukraine) 1993
ICF-3	Münich (Germany)	1973	ICF-9 Sydney (Australia) 1997
ICF-4	Waterloo (Canada)	1977	ICF-10 Honolulu (USA) 2001
ICF-5	Cannes (France)	1981	ICF-11 Turin (Italy) 2005
ICF-6	New Delhi (India)	1984	ICF-12 Ottawa (Canada) 2009

ORGANIZERS

The Chinese Society of Theoretical and Applied Mechanics (CSTAM)

Fracture Group of Hong Kong, China (FGHKC)

Chinese Mechanical Engineering Society (CMES)

Chinese Materials Research Society (CMRS)

Chinese Society for Corrosion and Protection (CSCP)

Chinese Society of Aeronautics and Astronautics (CSAA)

The China Structural Integrity Consortium (CSIC)

Chinese Society for Metals (CSM)

ORGANIZING COMMITTEE

Chairman:

Shouwen Yu (Tsinghua University)

Co-Chairmen:

Wei Yang (Zhejiang University)

Tongyi Zhang (The Hong Kong University of Science & Technology)

Secretaries:

Xi-Qiao Feng (Tsinghua University)

Yazheng Yang (The Chinese Society of Theoretical and Applied Mechanics)

International Scientific Advisory Board

(In alphabetical order of last name)

Leslie Banks-Sills (Israel)	Anthony R. Ingraffea (USA)
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John W. Hutchinson (USA)	George C. Sih (China)
Keh-Chih Hwang (China)	Jun Sun (China)



Zhigang Suo (USA)	Zhigan	g Suo	(USA)
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David Taplin (UK)

Shandong Tu (China)

Viggo Tvergaard (Denmark)

Cynthia A. Volkert (Germany)

Kim Wallin (Finland)

Gordon Williams (UK)

Xue-Ren Wu (China)

Wei Yang (China)

Lin Ye (Australia)

Toshimitsu Yokobori (Japan)

Shouwen Yu (China)

Tongyi Zhang (China)

Zhiliang Zhang (Norway)

HONOUR LECTURES

Opening Honour Lecture
Subra Suresh (USA)



President's Honour Lecture
Alberto Carpinteri (Italy)



Closing Honour Lecture
Yiu-Wing Mai (Australia)



TENTATIVE SCIENTIFIC PROGRAM

No.	Sessions of ICF13
1	Advanced Manufacture and Processing (Including Welding, Cutting, Surface Treatment, etc.)
2	Aeronautics and Aerospace
3	Aging
4	Analytical Models
5	Biomaterials and Tissues
6	Biomechanics
7	Ceramics/Ceramic Matrix Composites
8	Computational Mechanics
9	Concrete and Rock
10	Corrosion, Environmentally Assisted Cracking, and Corrosion Fatigue
11	Criteria of Fracture and Failure
12	Damage and Micromechanics
13	Dislocations and Defects
14	Education on Fracture and Fatigue
15	Electronic Materials
16	Embrittlement (Hydrogen, Liquid Metals, etc.)
17	Failure Analysis
18	Fatigue
19	Functionally Graded Materials
20	Geomechanics, Geophysics, and Tectonics
21	Healthy Monitoring of Structures
22	High Temperature and Creep
23	History of Fracture Mechanics and Fatigue
24	Impact and Dynamics
25	Instability
26	Interaction between Structures and Liquids (or Ice)





No.	Sessions of ICF13
27	Inverse Problems
28	Lightweight Materials and Structures
29	Materials in a Space and Severe Environment
30	MEMS and NEMS
31	Mesoscale Modeling
32	Mixed Mode and Constraint Effects
33	Multi-Field Coupling
34	Multiscale Experiments and Modeling
35	Nano- or Micro-Scale
36	Nanomaterials
37	Nondestructive Examination
38	Nonlinear Fracture Mechanics
39	Physical Aspects
40	Pipelines and Pressure Vessels
41	Plasticity
42	Polymer- and Metal-Matrix Composites
43	Polymers
44	Railways
45	Reliability, Durability, and Life Cycle Modeling
46	Residual Stresses
47	Scaling Laws and Size Effects
48	Smart Materials and Structures
49	Soft Matter/Materials
50	Statistical Physics and Fracture
51	Structural Integrity and Safety Assessment
52	Surfaces and Interfaces
53	Thin Films, Coating, and Membranes
54	Transportation Infrastructure: Bridges and Roads

MINI-SYMPOSIUMS

No.	Mini-Symposiums of ICF13		
1	Professor Sir Alan Howard Cottrell Memorial Symposium		
2	Professor Anthony G. Evans Memorial Symposium		
3	Challenging Issues in Intelligent Materials and Structures		
4	Very High Cycle Fatigue		
5	Extended Finite Element Methods and Their Applications		
6	Materials and Structures Under Severe Conditions		
7	Strategic International Cooperative Research on the Predicting Methods of the Life of Crack Growth and Initiation under High Temperature—Creep Fatigue Conditions		
8	Reliability and Integrity of Engineering Structures		
9	Boundary Element Methods and Their Applications in Gradient Materials		
10	Local Approaches to Cleavage and Ductile Fracture		
11	Infrastructure Engineering Asset Management		
12	Multiscale Modeling of Biological Systems		







ICF AWARDS

The following honours will be awarded on ICF13.

ICF Takeo Yokobori Gold Medal

This medal will be presented to a senior researcher in recognition of life-time service to ICF through his/her career. In addition to scientific achievements in the field of fracture, the impact of the service provided to ICF shall be a major criterion for selection of the winner.

ICF Sir Alan H. Cottrell Gold Medal

This medal will be presented to a senior researcher in the field of fracture who through his/ her work has made pioneering contributions to the understanding of the phenomenon of fracture.

ICF George Irwin Gold Medal

This medal will be presented to a senior researcher whose pioneering contributions have had lasting impact on engineering applications of fracture theories.

ICF Paul C. Paris Gold Medal

This medal will be presented to a senior researcher whose pioneering contributions have had a lasting impact on structural integrity assessment methods.

Constance Tipper Silver Medal

This medal will be presented to a mid-career scientist/engineer who has made significant contributions in any aspect of research in the field of fracture.

Other Awards

Outstanding Paper Awards and Outstanding Paper Awards by Young Researchers (35 years or less in age on June 30, 2013) will also be presented.

PRELIMINARY TIMETABLE

	Sunday June 16	Monday June 17	Tuesday June 18	Wednesday June 19	Thursday June 20	Friday June 21
8:30-10:10		Opening Ceremony & Opening Honour Lecture	Plenary Lectures	President's Honour Lecture & Plenary Lectures	Plenary Lectures	Plenary Lectures
10:10-10:30		Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break
10:30-12:10		Plenary Lectures	Parallel Sessions	Parallel Sessions	Parallel Sessions	Closing Honour Lecture & Closing Ceremony
12:10-14:00		Lunch Time	Lunch Time	Lunch Time	Lunch Time	
14:00-15:40	Registration	Plenary Lectures	Parallel Sessions	Parallel Sessions	Parallel Sessions	
15:40-16:00	Registration	Coffee Break	Coffee Break	Coffee Break	Coffee Break	
16:00-17:40	Registration	Parallel Sessions	Parallel Sessions	Parallel Sessions	Parallel Sessions	
17:40-18:00	Registration					
18:00-20:00	Registration & Welcome Reception					
10:00-18:00	Exhibition	Exhibition	Exhibition	Exhibition	Exhibition	
19:00-21:00		ICF ExCo. Meeting 1	ICF Council Meeting	ICF ExCo. Meeting 2	Banquet	

The ICF13 Secretariat reserves the right of changing any session in the final program. Changes to the program will be published on the website on a regular basis.





CALL FOR ABSTRACTS

The 13th International Conference on Fracture invites interested engineers and scientists in all aspects of fracture to participate in this conference at Beijing, China. The conference will cover the largest developments in mechanics and mechanisms of fracture, fatigue and strength of materials, structures, and systems.

Prospective authors are kindly requested to submit their abstracts before August 31, 2012. Each author will be invited to give an oral presentation. Abstracts should be submitted through the conference website (http://www.icf13.org) via the following two steps:

Registration of Participants

All contributors are requested to register themselves using the Paper On-Line Submission function on the conference website. The contributor is requested to input a valid email address, which will be used together with a password to log in before submitting an abstract.

Submission of Abstracts

Each abstract is limited to no more than 200 words. It should not contain figures or drawings. All abstracts will be printed, after acceptance for presentation, in the Abstract Book. After the submission is completed, the contributor will receive a confirmation email.

Abstract Submission Deadline: August 31, 2012 For Further Information: www.icf13.org

REGISTRATION AND ACCOMMODATION

REGISTRATION INFORMATION

Registration for participation in the conference should be done using the Registration for Participation function on the conference website. The registration fee, charged in Chinese Yuan (CNY), is as follows:

Fee per person
4,800 CNY
5,400 CNY
2,400 CNY
2,700 CNY

ACCOMMODATION

There are a number of hotels of different categories, close to the conference venue in the Olympic Village. Recommended hotels will be conveniently accessed from the conference website: http://www.icf13.org.

KEY DATES

Deadline for Submission of Abstracts	Aug. 31, 2012
Notification of Acceptance of Abstracts	Oct. 05, 2012
Deadline for Submission of Papers	Nov. 15, 2012
Notification of Acceptance of Papers	Dec. 29, 2012





GENERAL INFORMATION

LANGUAGE

The official language of the conference will be English. Simultaneous translation will not be provided. All abstracts should be submitted and presented in English.

PUBLICATION OF PAPERS

All accepted papers will be published in the proceedings of ICF13 in the form of CD-ROM. The proceedings, together with a book of abstracts, will be provided to the participants at registration. Selected papers will be published, after peer review, in some special issues of international journals.

EXHIBITION AREA

A trade and technical exhibition will be held during the conference. Sponsorship is invited in support of the conference. Please contact the ICF13 Secretariat if you are interested in sponsoring or participating in the exhibition.

SECRETARIAT OFFICE

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BEIJING HIGHLIGHTS

As the capital city of the People's Republic of China, Beijing is the nation's political and cultural hub. Additionally, it is the focal point for the country's transportation, scientific and technological development, education and communication.

Beijing is world-famous for its treasure of historical sites and enchanting natural scenery, making it a compelling tourist destination during people's China travel. It offers a staggering array of attractions including the resplendent Forbidden City, the majestic Tiananmen Square (the world's largest public square), the grand meandering Great Wall, and Beihai Park (Beijing's oldest imperial garden). It is a remarkable city offering an abundance of ancient and modern architectures, temples, gardens, and museums and a variety of colorful local flavors and customs.

Beijing is also a food-lovers' dream. It is difficult to imagine a city with denser restaurants or a more exhaustive variety of Chinese and foreign cuisines. There is also no shortage of entertainment with the Beijing Opera, Concert, and Acrobatics being popular choices.





Additional information on Beijing can be found at http://english.visitbeijing.com.cn.

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