

Third International Conference on

Fatigue of Composites

13(Mon) - 15(Wed), Sept., 2004

**Shin Daigaku Kaikan
Doshisha University, Kyoto, JAPAN
(Conference place is changed)**

Karasuma - Kamitatuiri - Sagaru,
Kamigyo-ku Kyoto, 602-0023, JAPAN

4th Circular



The City of Kyoto

Kyoto was the old residential area of the Royal Family, that is, the capital of Japan, for more than a thousand years from 794 to 1869 when modern Japan was elected. The conference site, Nijima Kaikan of Doshisha University is located in the heart of Kyoto next to the Imperial Palace. Numerous historic temples, shrines etc. are open to public. The city is served by the express trains from Osaka Kansai International Airport (75min) and by Shinkansen trains from Tokyo (137min).



TOPICS

Fatigue of composite materials:

- # Damage mechanisms: degradation process, contribution of mesoscopic components
- # Influence of loading (mechanical, thermomechanical, multiaxial, loading spectra), rate effects, impact
- # Modeling: damage mechanics, residual stiffness and strength, life prediction
- # Manufacturing and processing effects: curing, machining, heat treatment, manufacturing defects, problems related to new processing method like RTM
- # Testing and evaluation: test methods, data interpretation, sensors, nondestructive evaluation.
- # Industrial applications: predictive maintenance, failure analysis, accelerated testing, computer assisted design
- # Damage tolerance

INVITED LECTURES

- Prof. C. Bathias (CNAM, France): Opening conference
- Dr. M. Kageyama (Japan Defense Agency, Japan): Development of Co-Cured Composite Structures for XF-2 Fighters
- Dr. T. Beumler (Dept. Fatigue and Damage Tolerance, Airbus, Germany): Fatigue strength justification concept for GLARE structures
- Drs. G. Murri and T.K. O'Brien (NASA Langley Research Center, USA): Fatigue testing and life prediction for composite rotor hub flex beams
- Dr. C. Kensche (DLR Stuttgart, Germany): Fatigue of composites for wind turbines
- Prof. M. C. Lafarie-Frenot: Damage mechanisms induced by cyclic ply stresses in carbon/epoxy laminates - environmental effects - (Poitiers Univ., France)
- Prof. K. Reifnsider (Univ. Connecticut, USA): Closing conference

AIMS AND SCOPE

The International Conference on Fatigue of Composites, ICFC, was founded in 1997. The first conference was held in Paris (Chairmen: C. Bathias and R. Fougères), and has successfully been followed triennially by the second conference in Williamsburg (VA, USA, 2000, Chairman: K. Reifnsider). This series of conferences has brought outstanding progress in reviewing the present state of knowledge and providing forum to highlight fundamental and applied researches on the fatigue behavior of composite materials. We are pleased to announce that the third conference on Fatigue of Composites (ICFC-3) will be held in Kyoto.

Though composite materials have already obtained a certain position as structural materials for various industrial applications, the fundamental understandings and representations of their response to long-term durability are still fragmentary at best. ICFC-3 is concerned with experimental and analytical characterization for composite materials subjected to mechanical or/and thermal cyclic loads in conjunction with normal or extraordinary environments as well as modeling of fatigue behavior of composite materials in terms of long-term durability. Due to the vast growing of composite materials technology, the new fields of application such as electric devices, micro-machines and biomaterials are highly welcomed as well as the conventional structural applications. All types of composites (polymer, ceramic and metal based) will be addressed by the conference.

CALL FOR PAPERS

Please visit our web site.
<http://compo.jsms.jp/ICFC3/ICFC3-web.html>

Deadline for abstract (Title and short abstract in 200 words):
Notice for acceptance:

Deadline for registration with extended abstract (A4 2 pages with figures): June 30, 2004

Program on web site:

Deadline for submission of full manuscript for IJF:

February 29, 2004
March 31, 2004

July 31, 2004

September 15, 2004

Organized and sponsored by

Society of Materials Science, Japan (JSMS),
Doshisha University.

Co-sponsored by

Japan Society for Composite Materials,
The 21st Century COE Program "Center of Excellence for Research and Education on Complex Functional Mechanical Systems", Kyoto University.

In cooperation with

American Society for Composites,
European Society for Composites,
AMAC (French Society for Composites),
SF2M (French Society for Materials),
Materials Research Group,
Center for Composite Materials and Structures,
Virginia Polytechnic Institute and State University.

Organization

Chairmen: T. Fujii (Doshisha Univ.) and N. Takeda (Univ. of Tokyo).
Co-Chairmen: Chairman of Committee on Composite Materials, JSMS,
Y. Nakai (Kobe Univ., Representative of Committee on Fatigue of Materials) and
K. Kishimoto (Tokyo Inst. Tech., Representative of Committee on Fracture
Mechanics, JSMS).

Chairman of Local Organizing Committee: Y. Miyano (Kanazawa Institute of
Technology).

Secretaries: M. Hojo (Kyoto Univ.) and K. Okubo (Doshisha Univ.).

Scientific Committee (Under negotiation)

I. Verpoest (Belgium), J. Renard (France), A. Vautrin (France), N. Himmel
(Germany), K. Schulte (Germany), I. Crivelli-Visconti (Italy), C.-G., Gustafson
(Norway), A. Torres Marques (Portugal), A. Blom (Sweden), P. Hill (UK),
A. Plumtree (Canada), S. Case (USA), W. S. Johnson (USA), T.K. O'Brien (USA),
J. Whitcomb (USA), A. Baker (Australia), Y.-W. Mai (Australia),
K.S. Han (Korea), I. Lee (Korea), H. Fukuda (Japan), M. Hojo (Japan),
T. Ishikawa (Japan), K. Kishimoto (Japan), K. Kageyama (Japan),
Y. Nakai (Japan), Y. Miyano (Japan).

Advisory Committee (Under negotiation)

C. Bathias (France, Founder of ICFC), K. Reifsnider (USA, Founder of ICFC),
T. Fukuda (Japan), I. Kimpura (Japan), K. Komai (Japan), K. Tanaka (Japan),
M. Zako (Japan), C.S. Hong (Korea).

Local Organizing Committee

Y. Miyano (Kanazawa Institute of Technology), Y. Takao (Kyushu Univ.),
N. Takano (Osaka Univ.), M. Kawai (Tsukuba Univ.), H. Kawada (Waseda Univ.),
H. Hamada (Kyoto Inst. Tech.), K. Tohgo (Shizuoka Univ.), Y. Mutoh (Nagaoka Univ.
Tech.), K. Nishiyabu (Osaka Pref. Collage of Technology), T. Tanimoto (Shonan Inst.
Tech.), K. Hirano (AIST), C. Masuda (Waseda Univ.), S. Ogihara (Sci. Univ. Tokyo),
H. Kato (NAL), H. Hyakutake (Fukuoka Univ.), K. Nakama (Tohotenax),
Y. Shigegaki (IHI), M. Kageyama (Japan Defense Agency), K. Amaoka (Fuji Heavy
Industries), C. Fujiwara (Mitsubishi Heavy Industries), M. Imuta (Kawasaki Heavy
Industries), A. Kitano (Toray), M. Sugimori (Mitsubishi Rayon)

PUBLICATION POLICY

Only "Book of Abstracts" will be distributed at the conference. The full manuscripts
will be collected for the "Special Issue of the International Journal of Fatigue" (Published by
by the deadline will be screened by 2-3 reviewers. Then, the authors will be asked
to make any revisions as needed, and only accepted manuscripts will be published
as original and review papers in the Special Issue of IJF.

REGISTRATION FEE

Normal registration fee: 25,000 Japanese Yen
Student registration fee: 10,000 Japanese Yen

RELATED CONFERENCES

11th US-Japan Conference on Composite Materials
(September 9-11, 2004 Yamagata University Yonezawa, Yamagata, Japan)
<http://gtlab.ise.osaka-sandai.ac.jp/US-Japan/>

5th Joint Canada-Japan Workshop on Composites
(September 6 - 8, 2004 Yonezawa, Yamagata, Japan)
<http://gtlab.ise.osaka-sandai.ac.jp/Canada-Japan/>

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MORE INFORMATION

<http://compo.jsms.jp/ICFC3/ICFC3-web.html>