

FGM2006

9th International Symposium on
Multiscale and Functionally Graded Materials (M&FGMs)

15-18 October 2006
Renaissance Ilikai Waikiki Hotel, Honolulu, Hawai'i, USA

FURTHER INFORMATION

To ensure you receive a copy of the Preliminary Program and to register for email updates about **FGM2006** please complete and return the reply form below.

- Please tick this box to be added to the **FGM 2006** email list and receive regular updates about the conference and reminders of important deadlines or sign up online at www.fgm2006.org

Email address: _____

- I intend to submit an abstract for oral presentation
 I intend to submit an abstract for poster presentation
 I intend to participate as a delegate only
 I am interested in exhibiting at the symposium or in commercial sponsorship opportunities - please send me details

PLEASE PRINT OR TYPE

Title (Prof, Dr, Mr, Ms) _____

Name _____

Job Title _____

Company/Institution _____

Address _____

State/Country _____

Post/Zip Code _____ Country _____

Tel _____ Fax _____

Registration Information

Early Registration: \$550 (before September 21, 2006)
Student: \$275 (before September 21, 2006)
Banquet: \$50 per person

Post, fax or email to:

Prof. Glaucio H. Paulino
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FGM 2006 Conference
Prof. Glaucio H. Paulino
Department of Civil and Environmental Engineering
University of Illinois, 2209 Newmark Laboratory
205 N. Mathews Ave., Urbana, IL 61801-2352



Renaissance Ilikai Waikiki Hotel, Honolulu, Hawai'i, USA

Join international delegates to review state-of-art techniques and recent developments in the field of Multiscale and Functionally Graded Materials (M&FGMs).

Call for Papers

Contributors are now invited for oral and poster presentations at the conference.

Deadline for submission of abstracts: 29 March 2006

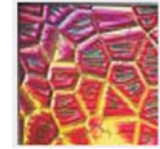
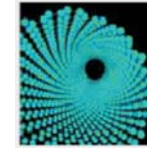
Deadline for submission of compact papers: 1 September 2006

See inside for more information or visit:

www.fgm2006.org



Second Announcement and Call for Papers



15-18 October 2006

Renaissance Ilikai Waikiki Hotel, Honolulu, Hawai'i, USA

Join international delegates to review state-of-art techniques and recent developments in the field of Multiscale and Functionally Graded Materials (M&FGMs).

Chairman:

Prof. Glaucio H. Paulino, *University of Illinois at Urbana-Champaign, USA*

Co-Chairs:

Prof. Marek-Jerzy Pindera, *University of Virginia, USA*

Prof. Robert H. Dodds, *University of Illinois at Urbana-Champaign, USA*

Prof. Fernando Alves Rochinha, *Universidade Federal do Rio de Janeiro, COPPE/UFRJ, Brazil*

Call for Papers

Extended deadline for submission of abstracts:

29 March 2006

Deadline for submission of compact papers:

1 September 2006

www.fgm2006.org



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Multiscale and Functionally Graded Materials (M&FGMs)

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Multiscale and Functionally Graded Materials (FGMs) are characterized by spatially varied microstructures created by non-uniform distributions of the reinforcement phase with different properties, sizes, and shapes, as well as, by interchanging the role of reinforcement and matrix materials in a continuous manner.

Such multi-phase materials cover a range of space and time scales, and are best understood by means of a comprehensive multiscale multiphysics approach. Such materials have a broad range of applications including for example, biomechanical, automotive, aerospace, mechanical, civil, nuclear, and naval engineering.

New applications are continuously being discovered and developed. This conference intends to provide opportunities for exchanging, discussing and enhancing the state-of-art techniques and recent developments in the fields of Multiscale & FGMs. Topics will include:

- Processing
- Manufacturing
- Design and characterization
- Modeling
- Applications
- Nano-FGMs
- Biomedical and Eco-materials
- Multifunctional materials
- Multiscale multiphysics modeling
- Topology optimization and Homogenization
- Thin films and Coatings
- Computational techniques
- Testing and Characterization

Special Issues

- International Journal for Multiscale Computational Engineering
- International Journal of Plasticity

Contributions are invited on the above topics for oral and poster presentations at the conference. Abstracts should be submitted online at www.fgm2006.org by **29 March 2006**.

Plenary Lectures

Prof. Jacob Fish
Rensselaer Polytechnic Institute, USA
"Design Impact, Fragmentation and Fatigue of Composite Materials and Structures"

Prof. Yoshinari Miyamoto
Osaka University, Japan
"Computer-aided Design and Processing of Functionally Structured and Graded Materials"

Prof. Emilio C. N. Silva
University of Sao Paulo, Brazil
"Design of Functionally Graded Piezoelectric Multiactuated Microtools Using Topology Optimization"

Prof. Winston Soboyejo
Princeton University, USA
"Bioinspired Design of Functionally Graded Material Systems"

Prof. Monika Willert-Porada
University of Bayreuth, Germany
"Design and Fabrication Principles in the Natural and Technical World of Graded Functionality"

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[All members of the IACFGM are members of the ISC]

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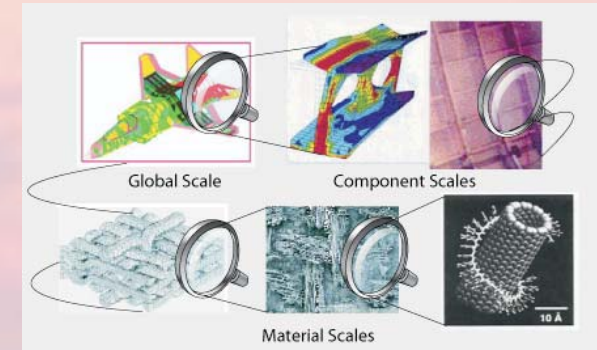
Q. J. Zhang
Wuhan University of Technology, China

Multiscale Short Course:

A short Course on Multiscale-Multiphysics Modeling will be given by **Prof. Jacob Fish** (Rensselaer Polytechnic Institute) on Sunday October 15th 2006.

The outline of the short-course is as following:

1. Motivation
2. Information-Passing Multiscale (IPM) Approach
 - 2.1 Asymptotic Multiscale methods
 - 2.2 Multiscale Enrichment based on Partition of Unity
3. Concurrent Multiscale (CM) Approach



Location

The conference will take place at the Renaissance Ilikai Waikiki Hotel, Honolulu, Hawai'i. The islands of Hawai'i are renowned for their breathtaking natural beauty and unique Hawai'ian culture. At the center of it all is the island of O'ahu with Waikiki beach, on the south shore of O'ahu, one of the world's most famous beaches.

The Renaissance Ilikai Waikiki, an ocean-front resort situated on the Ala Wai Yacht Marina at the edge of Waikiki. The Ilikai is conveniently located five minutes from the famous Ala Moana Shopping Center and Ala Moana Beach Park, ten minutes from downtown Honolulu and Aloha Tower Marketplace, and ten minutes from the International Market Place, Honolulu Zoo, and the Waikiki Aquarium. The hotel beach walkway leads from the lobby to Duke Kahanamoku Lagoon and the beginning of Waikiki Beach. Facilities at the hotel include two outdoor swimming pools, a tennis court, 3 restaurants and a poolside bar. The hotel is 20 minutes from Honolulu International Airport.

Special Hotel Room Prices (per night) before September 21, 2006:

Room	Single	Double	Triple	Quad
Run of House	\$150	\$150	\$180	\$210
Ocean View	\$180	\$180	\$210	\$240
Ocean Kitchen	\$210	\$210	\$240	\$270
Ocean View Suite, 1 Br	\$350	\$350	\$350	\$350
Ocean View Suite, 2 Br	\$575	\$575	\$575	\$575



Note: Limited availability of above room rates (first come first served).

Brief Presentation on the location of conference is available at: <http://cee.uiuc.edu/events/FGM2006/location.html>