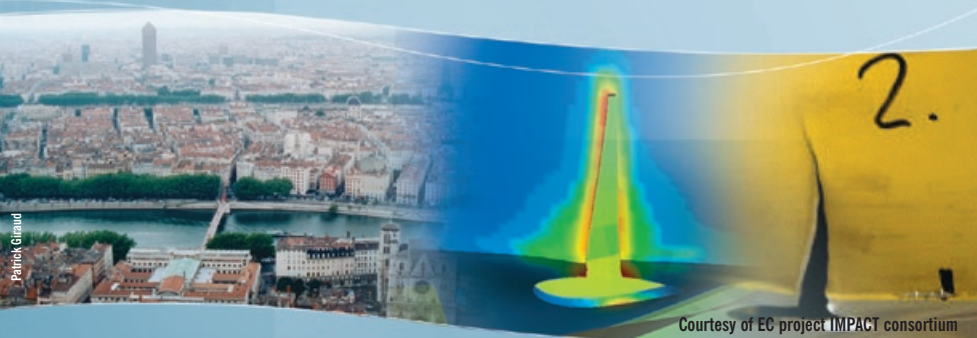


Discover state-of-the-art advancements in fracture mechanics!

# Fracture SEMINAR



Courtesy of EC project IMPACT consortium

Learn from expert speakers the essentials behind metallic and non-metallic fracture modeling and its application to industrial processes.



expert course

31 March - 1 April 2008  
Lyon, France

[www.esi-group.com/fractureseminar](http://www.esi-group.com/fractureseminar)

## Location



### Boscolo Grand Hotel

11 rue Grôlée  
69002 Lyon  
France

Tel. +33 (0)4 72 40 45 45  
Fax +33 (0)4 78 37 52 55  
[www.lyon.boscolohotels.com](http://www.lyon.boscolohotels.com)

Boscolo Grand Hotel is a comfortable 4-star hotel, perfectly located in the heart of Lyon.

ESI Group is a world leading software editor for the numerical simulation of prototype and manufacturing process engineering in applied mechanics.

**Book now!**  
**Space is limited!**

Detailed agenda and practical information at:

[www.esi-group.com/fractureseminar](http://www.esi-group.com/fractureseminar)

This seminar will take place in English.



## Fracture Seminar 2008 - Expert Course

Lyon, France 31 March - 1 April 2008

(please write in capital letters) Mr  Ms  Industry  Academic

First Name, Last Name: .....

Title: .....

Company: ..... Department: .....

Address: .....

Zip code: ..... City: .....

Country: .....

Phone: ..... Fax: .....

E-mail: .....

Registration fee : 1.850 Euros  
per participant, room and board included (2 days, 1 night).

### Payment:

- by check made payable to ESI Group
- by bank transfer to ESI Group

Authorized signature(s): \*

For payment information, please visit: [www.esi-group.com/fractureseminar](http://www.esi-group.com/fractureseminar)

\* I am aware that this registration is a firm commitment and that the course fee will be paid in any case, unless the registration is cancelled in writing prior to February 29, 2008. The course fee must be paid in full by March 21, 2008.

I N V I T A T I O N

R E G I S T R A T I O N



31 March - 1 April 2008  
Lyon - France

### Please register

- by mail
- by fax: +33 (0)4 78 14 12 02
- by email: [training@esi-group.com](mailto:training@esi-group.com)
- online:  
[www.esi-group.com/fractureseminar](http://www.esi-group.com/fractureseminar)

**Limited to the first 35 registrations.**

ESI Group reserves the right to cancel the seminar, in case of low enrollment.

# The lecturers

Course material will be presented by the following experts:

## Professor Frank McClintock

*Retired, Professor of Mechanical Engineering,  
Massachusetts Institute of Technology,  
USA*

## Professor Jean-Baptiste Leblond

*Member of the Académie des Sciences, France  
Professor at the Université Pierre et Marie Curie, France  
ESI Group Scientific Advisor, France*

## Professor Mark Kachanov

*Professor of Mechanical Engineering  
at Tufts University, USA*

## Dr. Alastair Johnson

*German Aerospace Institute (DLR)*

## Dr. Masahiro Fujii

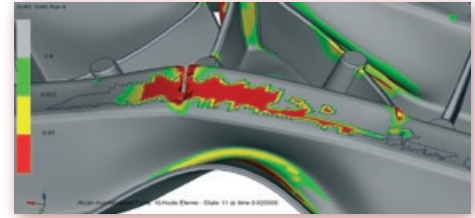
*Ube Industries Ltd., Japan*

## Philippe Gilles

*International Expert AREVA, France*

## Dr. Argiris Kamoulakos

*ESI Group Scientific Director, France*



Courtesy of BMW and Alcan Technology Management



Courtesy of Arcelor

A  
G  
E  
N  
D  
A

March 31, 2008  
(08:30am – 6:00pm)

- Opening - Introduction to the Seminar
- Safety margin assessment using fracture mechanics
- Modeling plastic crack formation and initial and continuing growth
- Connections between material microstructure and overall properties
- Cross-property connections between different physical properties
- Elasticity and conductivity of surfaces with micro-roughness
- Ductile rupture of metals: fundamentals
- Ductile rupture of metals: recent developments

April 1, 2008  
(08:30am – 3:30pm)

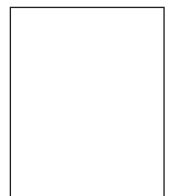
- Modeling crash and impact damage in composite aircraft structures - Part 1
- Modeling crash and impact damage in composite aircraft structures - Part 2
- Modeling of Polymer Fracture - Part 1
- Modeling of Polymer Fracture - Part 2
- Open discussion and conference wrap-up

## Who would benefit from attending?

- This course is designed for engineers and scientists from industry and research centers who wish to improve their knowledge in the field of fracture mechanics and its application in Virtual Performance Simulations.
- Participants should ideally possess a University Degree in Engineering (Mechanical, Aero, Marine, Civil, Materials, etc.).

## Why should you attend?

- Learn with the most prominent personalities in the area, benefit from their knowledge and latest research
- Better understand the “physics behind the screen” in order to make optimal design decisions
- Share experiences and tips with peers from around the world



## ESI Group

*Attn: Danièle Burdin-Dumont*

LE RÉCAMIER  
70 RUE ROBERT  
69458 LYON CEDEX 06  
FRANCE