



Invitation

International Forum on Engineering Decision Making

5th Forum:

**Global Catastrophic Risk Management**

**New Insights and Challenges**

December 7-10, 2010

Seminar- and Wellnesshotel Stoos

Stoos, Switzerland



IFED consortium:

M.H. Faber, ETH, Switzerland

J. Kanda, University of Tokyo, Japan

M.A. Maes, University of Calgary, Canada

S.G. Reid, University of Sydney, Australia

M.G. Stewart, University of Newcastle, Australia

### **Theme of the 5th IFED meeting**

New insights and challenges in global catastrophic risk management will be the focal point to be addressed and discussed at the 5<sup>th</sup> IFED meeting. This theme encompasses basic issues on the nature and characteristics of global risks, modeling and assessment of hazards and consequences, long term and indirect consequences, infrastructure vulnerability, systems resilience and robustness, loss estimation, engineering measures for risk reduction and mitigation, management of life safety and damages to the qualities of the environment, risk perception, risk regulation, risk policies and risk communication.

### **Background and motivation**

The IFED forums are concerned with engineering decision-making taking basis in information on risks. Over the last decade society has increasingly become aware of the relevance of catastrophic risks at global scales. Climatic change, volcanic eruptions, terrorism and pandemics count among the hazards most frequently mentioned in the global political agendas and dominating tabloid newspaper headlines.

Whereas there is a seemingly growing public concern regarding the timely and appropriate management of catastrophic global risks there appears to be several gaps related to how to deal with such hazards from a societal perspective. This concerns not least a common understanding of what comprises global catastrophic risks, but also includes fundamental philosophical, methodical and technical issues related to the definition of a framework on how to deal with such risks at the various organizational levels in society.

The 5<sup>th</sup> IFED meeting takes up this challenge and aims to:

- Discuss and identify potential perspectives of defining global catastrophic risks
- Define and suggesting frameworks for the management of global catastrophic risks
- Set the focus on relevance and significance of hazards and threats
- Discussing the most recent results on the modeling and analysis of natural and manmade hazards
- Present insights related to the assessment of direct and indirect consequences of global concern
- Present recent methods and techniques for risk analysis, risk assessment and risk management
- Present new ideas and results concerning engineering measures for risk reduction and risk mitigation
- Address and analyze issues and strategies on risk policy, risk regulation and risk communication from supranational to community levels

### **Aim of the 5th IFED forum**

The outcome of the 5<sup>th</sup> IFED meeting shall comprise a forum conclusion summarizing the most important issues related to the management of global catastrophic risks. This includes an outline of the “common ground consensus” among the invited experts but in addition and more importantly identifies the possible issues of controversy and future need for research.

## Venue

### Seminar- und Wellnesshotel Stoos

Ringstrasse 10

CH-6433 Stoos

Phone 0041 (0)41 817 44 44

info@hotel-stoos.ch

<http://www.hotel-stoos.ch>

The Seminar- und Wellnesshotel Stoos is situated 1300 meters above sea level in the beautiful mountain village Stoos.

The hotel offers on 1100qm a spa concept which is based on the knowledge of the effectiveness of local nature products.

There are plenty of possibilities for excursion in the region of central Switzerland. For example to Luzern or to Schwyz. We will help you and your accompanied person to find an attractive program for journeys.

The venue is easy to reach from Zurich airport and other destinations. You receive complete and detailed information (maps, time tables for trains and busses and cable cabins) after your registration.

## Registration

The registration fee for the forum includes accommodation (4 nights in single rooms), all lunches, dinners and refreshment breaks, Tuesday reception, Friday excursion and banquet and the ticket for the cable cabin to Stoos. The fee for participants is 960,- CHF.

The price for accompanied persons including accommodation for 4 nights, welcome reception, breakfast, dinner, the excursion and the banquet on Friday and the ticket for the cable cabin to Stoos is 773,- CHF.



### **Time flow**

The event begins on Tuesday December 7 late afternoon with a welcome reception. The forum will take place on Wednesday and Thursday the whole day and ends with the conclusion session on Friday morning. After having a sandwich we will start for an excursion on the top of the mountains where we get offered special tea or coffee.

Please take warm, waterproof winter clothes and boots with you. After this trip we will enjoy a banquet with local dishes in the hotel.



### **Notification of participation**

Please indicate your interest in participating in the forum by sending an e-mail, including name, affiliation, address, phone and preliminary title of your presentation, to [walzer@ibk.baug.ethz.ch](mailto:walzer@ibk.baug.ethz.ch) before September 20, 2010.



### **Abstracts and papers**

Detailed one-page abstracts of proposed papers for the forum must be submitted by September 20, 2010 to [walzer@ibk.baug.ethz.ch](mailto:walzer@ibk.baug.ethz.ch). Invitations to present papers at the forum will be based on the review and acceptance of the abstracts. Details of submission dates and formatting requirements for the final papers will be available on <http://www.ifed.ethz.ch/>. Full final papers are due at the IFED forum. All papers will also be available on the IFED webpage, following the conference and selected papers will be submitted for publication in a targeted journal.



## **IFED**

IFED is an international organization with the mission to explore critical issues, to share exciting developments, and to stimulate new initiatives in engineering decision making and risk analysis for engineering systems. Detailed information can be found on the IFED website: <http://www.ifed.ethz.ch/>

1<sup>st</sup> IFED 2004, St. Gallen, Switzerland: Consequence modeling in engineering decision making

2<sup>nd</sup> IFED 2006, Lake Louise, Canada: Decision making involving spatially distributed systems

3<sup>rd</sup> IFED 2007, Shoal Bay, Australia: Optimal strategies for disaster and hazard mitigation

4<sup>th</sup> IFED 2009, Hakone, Japan: Long-term Policy Makings for Sustainable Society

## **IFED consortium**

Michael Faber, ETH Zurich, Switzerland (current chair)

Marc Maes, University of Calgary, Canada (current vice-chair)

Mark Stewart, University of Newcastle, Australia

Stuart Reid, University of Sydney, Australia

Jun Kanda, University of Tokyo, Japan

## **IFED advisory council**

Bazzurro, Paolo, Air-Worldwide, USA

Breyse, Denys, CDGA, France

Corotis, Ross, University of Colorado, USA

Goyet, Jean, Bureau Veritas, France

Hall, Jim, Newcastle University, Newcastle upon Tyne, UK

Haukaas, Terje, University of British Columbia, Vancouver, Canada

Jordaan, Ian, Memorial University of Newfoundland, St. John's, Newfoundland, Canada

Kroon, Inger, COWI Consulting Engineers, Lyngby, Denmark

Lentz, Albrecht, COWI Consulting Engineers, Lyngby, Denmark

Mori, Yasuhiro, Nagoya University, Nagoya, Japan

Rackwitz, Ruediger, Technical University of Munich, Germany

Rizzuto, Enrico, University of Genoa, Italy

Schueremans, Luc, K.U. Leuven, Belgium

Seville, Erica, University of Canterbury, New Zealand

Sorensen, John, University of Aalborg, Denmark

Straub, Daniel, TUM, Munich, Germany

Sudret, Bruno, Phiméca Engineering, Paris, France

Takada, Tsuyoshi, University of Tokyo, Japan

Val, Dimitri, Heriot-Watt University, Edinburgh, UK

Vrijling, Han, Technical University of Delft, the Netherlands