

**INTERNATIONAL SYMPOSIUM ON  
SAFETY AND DURABILITY OF  
MATERIALS AND CONSTRUCTIONS  
SEDUREC 2009**

***Barcelona, 25-27 February 2009***

**PRELIMINARY PROGRAMME**

<b>February, 25th, 2009</b>	
<b>14:00</b> Welcome Address	
<b>14:30 Session 1</b>	
<b>Jesús Rodríguez</b>	Safety and durability of constructions. An industrial perspective
<b>Roger Owen</b>	Computational modeling of damage in structures and the development of retrofitting strategies
<b>Jacky Mazars</b>	A strategy to model the response of concrete structures under severe loadings: from static loads to impacts
<b>Arnon Bentur</b>	Design for durability of reinforced concrete structures: Concrete cover and field practices
<b>16:30</b> Coffee	
<b>17:00 Session 2</b>	
<b>Dan M. Frangopol</b>	Lifetime safety, redundancy and durability of structures under uncertainty
<b>Fabio Biondini</b>	Life-cycle oriented methods for structural analysis and design
<b>Franco Bontempi</b>	Structural robustness: analysis and design
<b>Antonio Mari</b>	Evaluation of the performance of structures along their service life by nonlinear evolutionary analysis models
<b>19:30</b> Welcome Reception	

## February, 26th, 2009

### 9:00 Session 3

<b>Manolis Papadrakakis</b>	Safety of structures under seismic loading: A critical assessment of the design codes
<b>Jorge Hurtado</b>	Optimized information approaches for structural reliability analysis
<b>Alex Barbat</b>	Evaluation of the seismic risk in urban areas by means of scenarios
<b>Joan Ramon Casas</b>	Safety and durability assessment of existing bridges. European Guidelines

11:00 Coffee

### 11:30 Session 4

<b>Herbert Mang</b>	Structural safety of concrete tunnel shells subjected to fire load
<b>Carmen Andrade</b>	Modelling of service life of the reinforcement
<b>Jerzy Rojek</b>	Structural failure analysis using the discrete method and combined discrete/finite element method
<b>Günther Meschke</b>	Durability oriented modeling and numerical simulation of concrete and reinforced concrete structures

13:30 Lunch

### 14:30 Session 5

<b>Kaspar J. Willam and Yunping Xi</b>	Experimental and Computational Observations on Thermal Spalling of Concrete Materials and Structures
<b>Miguel Ángel Toledo</b>	Rockfill dam safety in overtopping scenarios
<b>Suru Shah</b>	Some Properties of Highly Dispersed Carbon Nanotube Reinforced Concrete
<b>Gilles Pijaudier-Cabot</b>	Nonlocal damage based failure models and extraction of crack opening for durability analyses

16 :30 Coffee

### 17:00 Session 6

<b>Vicente Sánchez Galvez</b>	Numerical simulation of blast effect on reinforced concrete structures
<b>Bernard Schrefler</b>	Simulation of fire resistance and durability of concrete
<b>Xavier Oliver</b>	The continuum strong discontinuity approach: a computational setting to evaluate structural safety and deterioration in front of material failure

<b>Hans Reinhardt</b>	Exposure supported frost testing of concrete
<b>20:30</b> Banquet	
<b>February, 27th, 2009</b>	
<b>9:00 Session 7</b>	
<b>Peter Tanner</b>	Acceptable level of notional risks associated with structural design.
<b>David R. Jones</b>	Avoiding fatigue failure in large steel structures - problems of technology transfer between designers and codes, and codes and the scientific literature
<b>Mike Faber</b>	Risk informed decision making concerning engineered facilities
<b>Olga Rio</b>	Instantaneous deformability of actual new concept concrete for tunnels
<b>11:00</b> Coffee	
<b>11:30 Session 8</b>	
<b>Pere Roca</b>	Reliability analysis of historical structures
<b>Fuminori Tomosawa</b>	The normative on durability of concrete structures in Japan
<b>Eugenio Oñate and Benjamín Suárez</b>	Modelling and simulation of structural failure accounting for fluid-soil-structure interaction
<b>13:30</b> Farewell cocktail	