



## FraMCoS-8. March 10-14, 2013. Toledo, Spain

8<sup>th</sup> International Conference on Fracture Mechanics of Concrete and Concrete Structures

Conference web-site: <http://www.framcos8.org>

ORGANIZER : IA-FRAMCoS

SPONSORING ORGANIZATIONS:

UCLM, UNIVERSITY OF CASTILLA- LA MANCHA

ESIS, EUROPEAN STRUCTURAL INTEGRITY SOCIETY

SEIE-GEF, SPANISH STRUCTURAL INTEGRITY SOCIETY

RILEM, INTERNATIONAL UNION OF LABORATORIES AND EXPERTS IN CONSTRUCTION MATERIALS, SYSTEMS AND STRUCTURES

### CONFERENCE TOPICS

The major topics for FraMCoS-8 conference are:

- A. Recent advances in fracture mechanics of concrete.
- B. Fracture and cracking behavior of reinforced and prestressed concrete structures.
- C. High-performance, high strength concretes and FRC.
- D. Advances in structural design codes.
- E. Structural monitoring and assessment.
- F. Repair and retrofitting, practical applications.
- G. Durability and corrosion-induced cracking.
- H. Interface fracture and debonding phenomena.
- I. Constitutive relations, time-dependent effects, cyclic and fatigue behavior.
- J. Brick masonry, concrete-like and quasi-brittle materials.
- K. Computational aspects in fracture mechanics of concrete.

### KEY DATES AND DEADLINES

March 1, 2012 – Proposals for organized sessions (via web).

March 15, 2012 – Submission of abstracts (via web).

April 30, 2012 – Preliminary acceptance to authors.

September 15, 2012 – Submission of complete camera-ready manuscripts (via web).

December 1, 2012 – Notification of final acceptance.

March 10-14, 2013 – Meeting at Real Fábrica de Armas, Toledo.

### ORGANIZED SESSIONS

In FraMCoS-8 conference, in addition to the individual submission of papers within the overall themes of the conference, experts are encouraged to organize sessions in advance on their specific topics. Each session organizer is expected to recruit about 6 – 8 papers for a session and serves as chairperson. Prospective session organizers are recommended to submit the session outline including the title of the session, and the titles and authors of the papers, through the conference web site.

A preliminary list of the Organized Sessions already planned follows:

- Control of cracking in RC structures: Coupling phenomena and crack indicators.  
Organized by Jacky Mazars [[jacky.mazars@inpg.fr](mailto:jacky.mazars@inpg.fr)].
- Durability characterization and modeling of multiple cracked strain hardening cementitious composites (SHCC).  
Organized by Michael Lepech [[mlepech@stanford.edu](mailto:mlepech@stanford.edu)].
- Dynamic response of concrete in tension-experimental evidence and modeling.  
Organized by Jaap Weerheijm [[j.weerheijm@tudelft.nl](mailto:j.weerheijm@tudelft.nl)] & Josko Ozbolt [[ozbolt@iwb.uni-stuttgart.de](mailto:ozbolt@iwb.uni-stuttgart.de)].
- Fracture mechanics prediction of durability of concrete.  
Organized by Hans Reinhardt [[reinhardt@iwb.uni-stuttgart.de](mailto:reinhardt@iwb.uni-stuttgart.de)].
- Multi-scale investigation of concrete fracture by numerical and physical experimentation.  
Organized by Peter Grassl [[peter.grassl@glasgow.ac.uk](mailto:peter.grassl@glasgow.ac.uk)], Gianluca Cusatis [[gianluca.cusatis@gmail.com](mailto:gianluca.cusatis@gmail.com)] & John Bolander [[jebolander@ucdavis.edu](mailto:jebolander@ucdavis.edu)].

- NDT/AE applications on concrete and concrete structures.  
Organized by Masayasu Ohtsu [[ohtsu@gpo.kumamoto-u.ac.jp](mailto:ohtsu@gpo.kumamoto-u.ac.jp)], Christian Grosse [[Grosse@cbm.bv.tum.de](mailto:Grosse@cbm.bv.tum.de)] & Eric N. Landis [[Landis@maine.edu](mailto:Landis@maine.edu)].
- Nonlocal computational methods for cementitious materials.  
Organized by Walter Gerstle [[gerstle@unm.edu](mailto:gerstle@unm.edu)].
- Recent advances in numerical modeling of cohesive fracture in concrete-like materials.  
Zhenjun Yang [[Zhenjun.Yang@manchester.ac.uk](mailto:Zhenjun.Yang@manchester.ac.uk)].
- Strengthening of RC beam-column joints.  
Organized by Appa Rao Gangolu [[garao@iitm.ac.in](mailto:garao@iitm.ac.in)].
- High Performance Fibre Reinforced Concrete: From material properties to structural applications.  
Organized by Giovanni Plizzari [[plizzari@ing.unibs.it](mailto:plizzari@ing.unibs.it)], Stephen Foster [[s.foster@unsw.edu.au](mailto:s.foster@unsw.edu.au)] & Viktor Mechtcherine [[Viktor.Mechtcherine@mailbox.tu-dresden.de](mailto:Viktor.Mechtcherine@mailbox.tu-dresden.de)].
- Fibre Reinforced Concrete for structural durability.  
Organized by Giovanni Plizzari [[plizzari@ing.unibs.it](mailto:plizzari@ing.unibs.it)], Stephen Foster [[s.foster@unsw.edu.au](mailto:s.foster@unsw.edu.au)] & Viktor Mechtcherine [[Viktor.Mechtcherine@mailbox.tu-dresden.de](mailto:Viktor.Mechtcherine@mailbox.tu-dresden.de)].
- Structural applications with Fibre Reinforced Concrete.  
Organized by Giovanni Plizzari [[plizzari@ing.unibs.it](mailto:plizzari@ing.unibs.it)], Stephen Foster [[s.foster@unsw.edu.au](mailto:s.foster@unsw.edu.au)] & Viktor Mechtcherine [[Viktor.Mechtcherine@mailbox.tu-dresden.de](mailto:Viktor.Mechtcherine@mailbox.tu-dresden.de)].

### PLENARY SPEAKERS

**Carmen Andrade**

Instituto Eduardo Torroja, Madrid, Spain

Probabilistic treatment of rebar depassivation and its influence in the calculation of the structural limit states.

**Alberto Carpinteri**

Politecnico di Torino, Turin, Italy

Failure mode scaling transitions in RC beams in flexure: Tensile, shearing, crushing.

**Stephen Foster**

University of New South Wales, Sydney, Australia

High performance Fibre Reinforced Concrete: Fundamental behaviour and modelling.

**Francois Hild**

LMT Cachan, France

On the use of 3D images and 3D displacement measurements for the analysis of damage mechanisms in concrete-like materials.

**Victor Saouma**

University of Colorado, Boulder, USA

Applications of Fracture Mechanics in Dams Engineering.

**Jan G. M. van Mier**

FraMCoS President, The Netherlands.

Recent advances in the understanding of compressive fracture of concrete.