

International Union of Testing and Research Laboratories for Materials and Structures

Réunion internationale des laboratoires d'essais et de recherches sur les matériaux et les constructions

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RILEM SPRING CONVENTION 19-21 March 2018 in Barcelona







International Union of Laboratories and Experts in Construction Materials. Systems and Structures









3 recommendations

RILEM mission includes:

- stimulation of new directions of R&D
- promotion of excellence in construction
- technology transfer and application of knowledge world-wide
- encouragement of international cooperation





37 TCs are active in 6 Clusters 4 Clusters pertaining to concrete



Material Processing and Characterization

Barzin MOBASHER, Arizona State University, USA

Transport and Deterioration Mechanisms Esperanza MENÉNDEZ MÉNDEZ, IETcc (CSIC), Spain



Structural Performance and Design

Takafumi NOGUCHI, University of Tokyo, Japan



Service Life and Environmental Impact Assessment Kefei LI, Tsinghua University, China

Masonry and Timber

Paulo LOURENCO, University of Minho, Portugal

Bituminous Materials and Polymers Hervé DI BENEDETTO, ENTPE, France



Recently created committees

Cluster A. Material Processing and Characterization

MRP (Sonebi)	Measuring rheological properties of cement-based materials
TRM (Scrivener)	Tests for reactivity of supplementary cementitious materials
RAP (Tebaldi)	Asphalt Pavement Recycling
RSC (Mechtcherine)	Recommendations for use of superabsorbent polymers in concrete construction
CCF (Serna)	Creep behavior in cracked sections of fiber reinforced concrete

Cluster B. Transport and Deterioration Mechanisms

SCI (Ueli Angst)	Characteristics of the steel/concrete interface and their effect on initiation of
	chloride-induced reinforcement corrosion
	Carbonation of SCMs

Cluster C. Structural Performance and Design

RAC (Xiao) Structural behaviour and innovation of recycled aggregate concrete

Cluster D. Service Life and Environmental Impact Assessment

ISR (Saouma)	Prognosis of deterioration and loss of serviceability in structures
	affected by alkali-silica reactions
AAA (Wigum)	Avoiding ASRin concrete – Performance based concept



TC 244-NUM Numerical Modelling

Chair: Prof. Klaas van Breugel Secretary: Prof. Wolfgang Brameshuber

<u>Task of TC 244:</u> To consider, and reconsider, the evolution of numerical models and modeling of cementitious materials in science and engineering, given the present evolution of available computation power and advanced materials models.

Materials properties

- Hydration processes
- Evolution of nano/microstructure
- Mechanical properties
- Transport properties

Modelling and application aspects

- Type of models
- Multiscale modelling
- Accuracy and reliability
- Field of application of models





72nd RILEM-week Delft 26-29 August, 2018

SLD4: (TU-Delft & Tongji Univ.)

4th International Conference on Service Life Design for Infrastructures

CONMOD2018: (TU-Delft & Ghent Univ.)

International Symposium on Concrete Modelling

Klaas van Breugel Sessions



72nd RILEM-week 2018

MMC, CMC, CSC2I courses: (20-24/8/2018)

RILEM courses on Multiscale Modelling, Microscopy and Corrosion



ŤUDelft