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

Alejandro Durán-Herrera

RILEM Latin America Convener

Dimitri Feys

RILEM North America Convener

2018 Key Numbers

MEMBERSHIP

1454 members

71 countries

ACTIVITIES

41 Technical Committees

CO-SPONSORSHIP

12 courses

26 events

PUBLICATIONS

6 State-of-the-Art reports

9 recommendations

13 proceedings

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RILEM mission

- to **advance scientific knowledge** related to **construction materials, systems and structures** and to **encourage transfer** and **application** of this knowledge world-wide, through **collaboration of leading experts** in construction practice and science including academics, researchers, testing laboratories and authorities.

RILEM goals

- promote sustainable and safe construction, and improved performance and cost benefit for society,
- to stimulate new directions of research and its applications, promoting excellence in construction,
- to favour and promote cooperation at international scale by general access to advanced knowledge.

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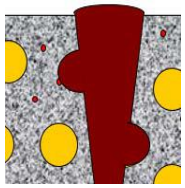
41 TCs are active in 6 Clusters

4 Clusters pertaining to concrete



Material Processing and Characterization

Barzin MOBASHER, USA

Transport and Deterioration Mechanisms

Esperanza MENÉNDEZ MÉNDEZ, Spain

Structural Performance and Design

Giovanni PLIZZARI, Italy

Service Life and Environmental Impact Assessment

Alexandra BERTRON, France

Masonry, Timber and Cultural Heritage

Enrico SASSONI, Italy

Bituminous Materials and Polymers

Michael WISTUBA, Germany

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Recently created committees

Cluster A. Material Processing and Characterization	
AMC	Use of **Agro-Based Materials** as Cementitious Additions in Concrete and Cement-Based Materials
CCL	**Calcined Clays** as Supplementary Cementitious Materials
CEC	**Controlled expansion** of concrete by adding MgO-based expansive agents taking the combined influence of composition and size of concrete elements into consideration
Cluster B. Transport and Deterioration Mechanisms	
CAM	**Chloride** transport in **alkali-activated materials**
FTC	Durability and Service Life of Concrete under the Influence of **Freeze-Thaw Cycles** combined with **Chloride Penetration**
TMS	**Test method** for concrete durability under combined role of **sulphate and chloride ions**
Cluster C. Structural Performance and Design	
IEC	**Impact and Explosion**
Cluster D. Service Life and Environmental Impact Assessment	

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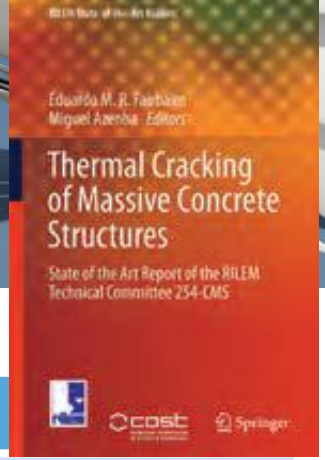

Reports and Recommendations 2018

State of the Art Reports	
238-SCM	Properties of Fresh and Hardened Concrete Containing Supplementary Cementitious Materials
248-MMB	Methods of Measuring Moisture in Building Materials and Structures
254-CMS	Thermal Cracking of Massive Concrete Structures
227-HPB	Physical Properties and Behaviour of High-Performance Concrete at High Temperature
237-SIB	Testing and Characterization of Sustainable Innovative Bituminous Materials and Systems
241-MCB	Mechanisms of Cracking and Debonding in Asphalt and Composite Pavements

Recommendations	
238-SCM	- Determination of the degree of reaction of siliceous fly ash and slag in hydrated cement paste by the selective dissolution method - Hydration stoppage by solvent exchange for the study of hydrate assemblages
250-CSM	- Test method for Textile Reinforced Mortar to substrate bond characterization
260-RSC	- Testing sorption by superabsorbent polymers (SAP) prior to implementation in cement-based materials - Using SAP to mitigate autogenous shrinkage

Similarities and Differences compared to ACI

- Both are scientific organizations intending to assemble, increase and spread knowledge
- Both have strong international presence
- Both sponsor scientific events, create proceedings and have their own journals: ACI Materials Journal / ACI Structural Journal vs. Materials and Structures / RILEM Technical Letters (open access)
- ACI is more broad into the practice of concrete, RILEM is more focused on ongoing research
- ACI is concrete focused, RILEM considers all construction materials
- Lifetime of RILEM technical committees is typically limited to 5 years

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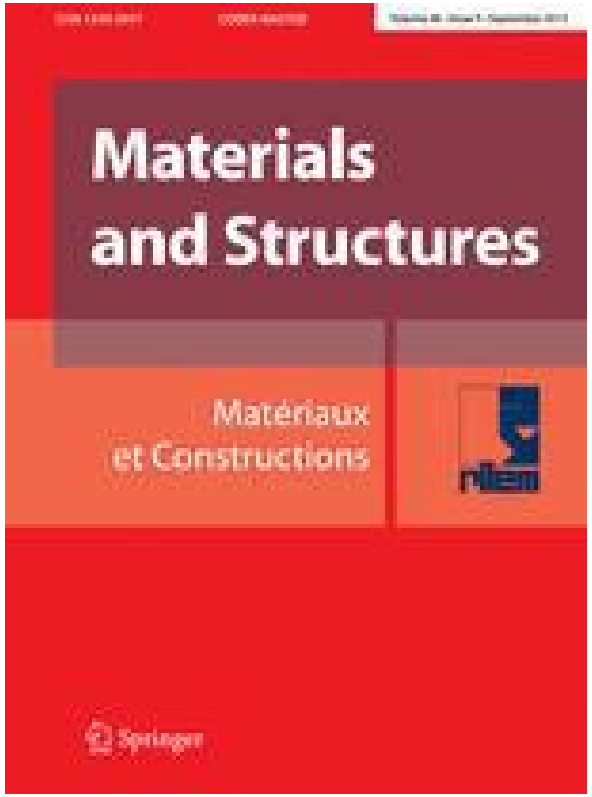

Original Scientific Papers on Construction Materials

RILEM
technical letters

Open Access, short communications on Construction Materials
Since March 2016

rilem.org:

Future RILEM Annual Weeks and Spring Conventions

	Spring Event	Annual Week
2020/74th	Guimarães, Portugal	Sheffield, UK
2021/75th	Paris, France	Merida, Mexico
2022/76th	Morocco	Kyoto, Japan
2023/77th	Italy	Vancouver, Canada

74th RILEM Annual Week

incorporating the 40th Cement and Concrete Science Conference.

The University Of Sheffield.

31 August – 4 September 2020

The Diamond, University of Sheffield

Organised by:
Department of Materials Science and Engineering, The University of Sheffield

and

Cementitious Materials Group, The Institute of Materials, Minerals and Mining (IoM³).

http://www.sheffield.ac.uk/materials/RILEM2020

The Institute of Materials, Minerals and Mining

The Institute of Concrete Technology

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Key conference topics include:

- Chemistry, materials science, and engineering characteristics of cements and concretes
- Performance of materials and structures in traditional and innovative applications
- Testing and characterization of construction and infrastructure materials
- Environmental and sustainability assessment of construction materials, systems, and structures

Call for abstracts:

Deadline for submission of abstracts is 31 January 2020.

rilem2020@sheffield.ac.uk

More info?

Rilem.net

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