



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

Kamal H. Khayat
RILEM North America Convener

Professor, Civil Engineering
Missouri University of Science & Technology



Fall 2015 | Denver
The Concrete Convention
and Exposition

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**





rilem.org

RILEM Bureau (2015 – 2018)

President: Johan VYNCKE, BBRI, Belgium

Vice-President: Ravindra GETTU, IIT Madras, India

Honorary President for 2016: Ole M. JENSEN, Technical U. of Denmark

Treasurer: Raoul FRANCOIS, LMDC, France

Outgoing President: Mark ALEXANDER, U. of Cape Town, South Africa

Members:

T. BITTENCOURT, U. of São Paulo, Brazil

W. BRAMESHUBER, IBAC der RWTH Aachen, Germany

V. MECHTCHERINE, Technical U. of Dresden, Germany

S. NAKAJIMA, BRI, Japan





rilem.org

Development Advisory Committee

DAC Chair: Prof. Geert DE SCHUTTER, Ghent University, Belgium

Technical Activities Committee

TAC Chair: Dr. Nicolas ROUSSEL, IFSTTAR, France

Educational Activities Committee

EAC Chair: Doug HOOTON, University of Toronto, Canada

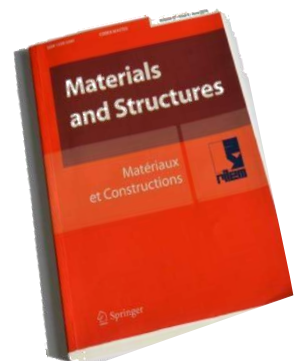
Secretary General

Pascale DUCORNET, France



Editor in Chief

Pietro Lura, IMPA, Switzerland

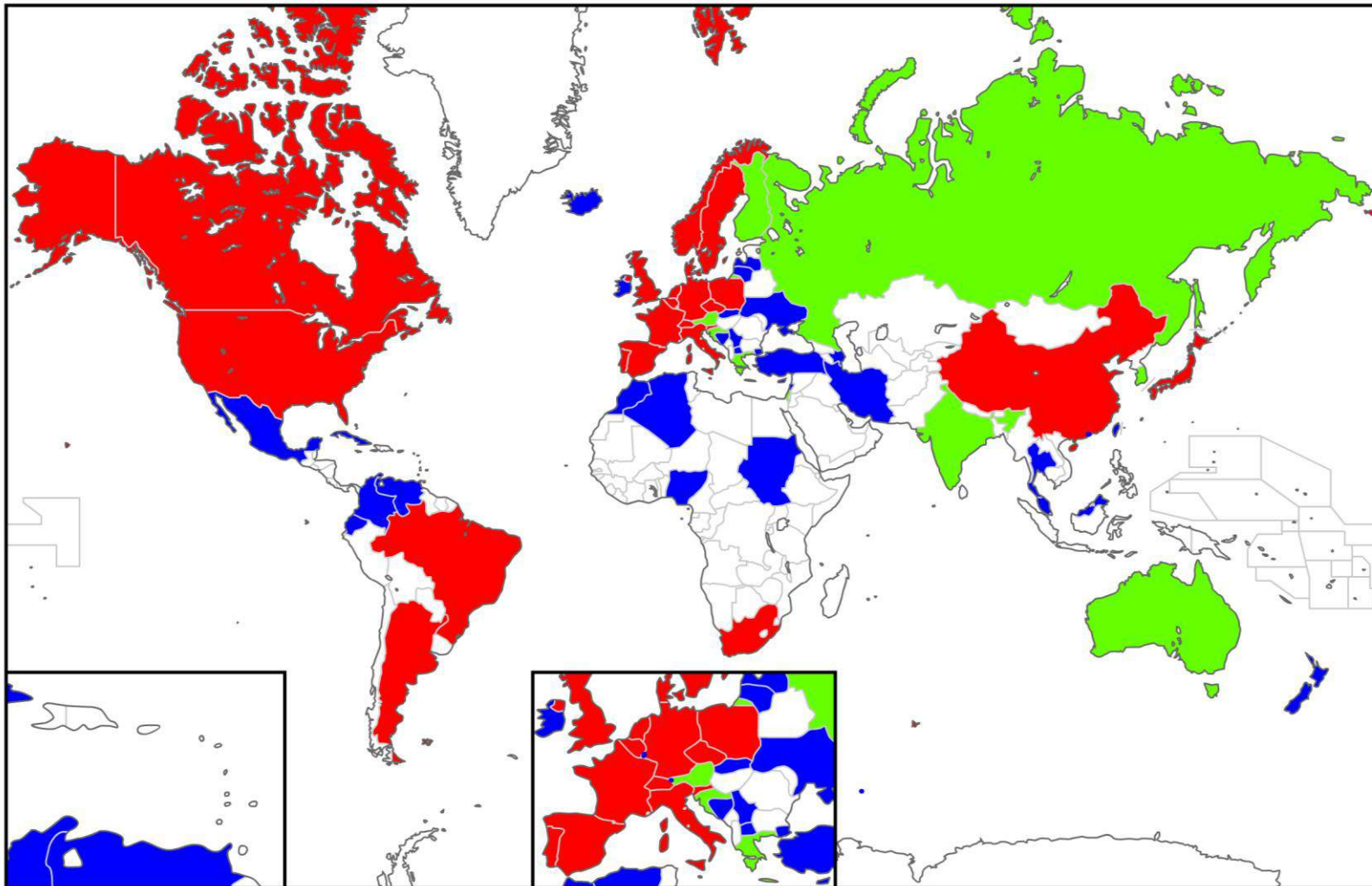




Nearly 1400 experts involved in RILEM
About 700 of members active in Technical Committees

2014

63 Countries, 102 Institutes





Regional Conveners

South Saharan/Africa

East Asia

East Europe and Central Asia

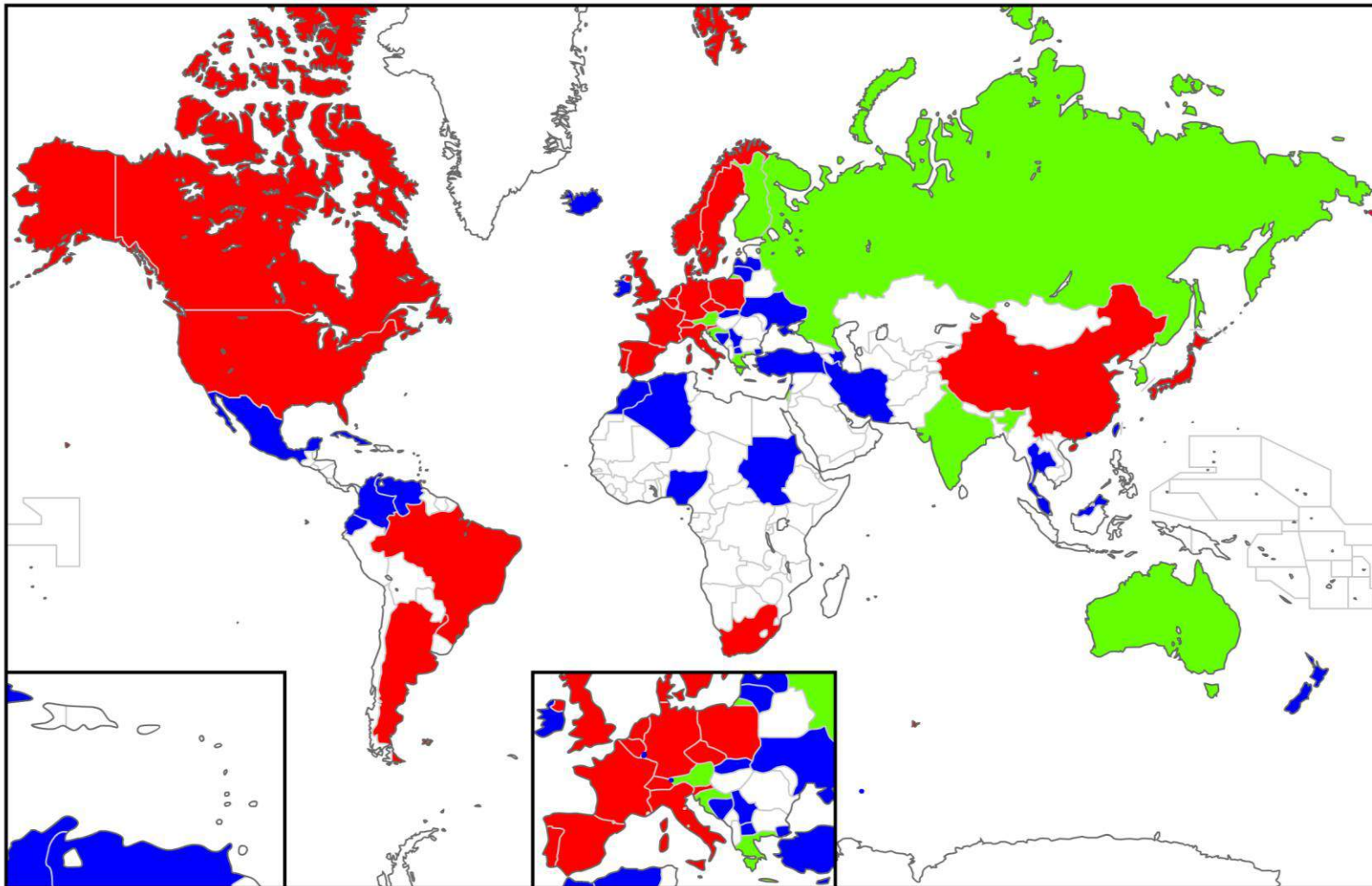
Latin America

North America

Oceania

Europe

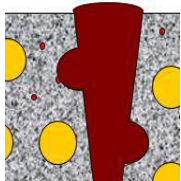
Middle East, North Africa & South Asia





rilem.org

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



Material Processing and Characterization

Barzin MOBASHER, Arizona State University, USA



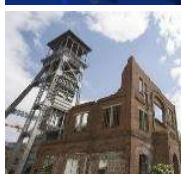
Transport and Deterioration Mechanisms

Esperanza MENÉNDEZ MÉNDEZ, IETcc (CSIC), Spain



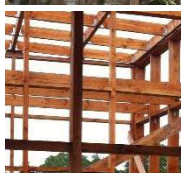
Structural Performance and Design

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



rilem.org

TCs created in 2014-15

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 chloride-induced reinforcement corrosion
------------------	--

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 concrete affected by alkali-silica reactions
AAA (Wigum)	Avoiding alkali aggregate reactions in concrete – Performance based design concept

RILEM State-of-the-Art Reports

Mario de Rooij
Kim Van Tittelboom
Nele De Belie
Erik Schlangen *Editors*

Self-Healing Phenomena in Cement-Based Materials

State-of-the-Art Report of RILEM
Technical Committee 221-SHC:
Self-Healing Phenomena
in Cement-Based Materials



TC 244-NUM **Numerical Modelling**

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

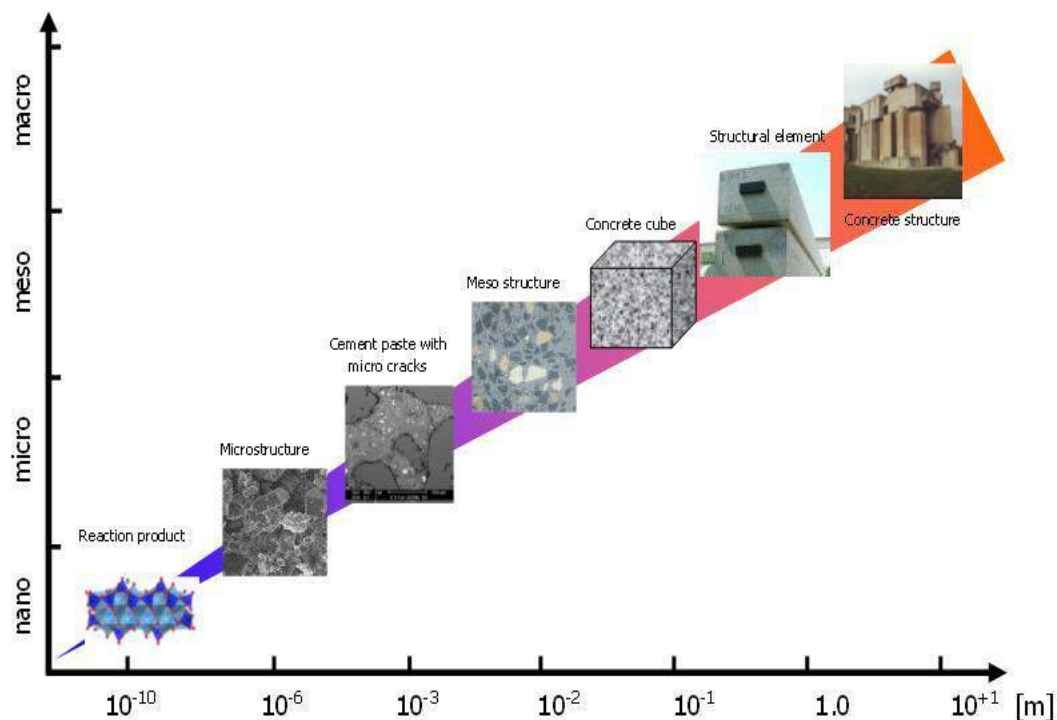
Task of TC 244: To consider, and reconsider, the evolution of numerical models and modeling of cementitious materials in science and engineering, given the present evolution of available computation power and advanced materials models.

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





International union of laboratories
and experts in construction materials,
systems and structures



American Concrete Institute
Always advancing

Discussions with ACI in Paris, 18 Sept. 2014

Bill Rushing, ACI President

Ron Burg, ACI Executive Vice President

RILEM: Johan Vyncke, VP; Pascale Ducornet, SG; Nicolas Roussel, TAC Chair

Selected Points for Consideration:

- RILEM liaison member in ACI TCs
- ACI - RILEM Joint Workshop on specific technical topics
- Explore potential synergies for ACI and RILEM TC's



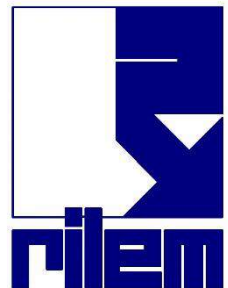
RILEM Week 2016, Lyngby (Copenhagen), Denmark, 21-24 August





SCC 2016

MAY 15-18, 2016
WASHINGTON, DC



MISSOURI
S&T



National Ready Mixed Concrete Association



ACBM