

# **75<sup>th</sup> RILEM ANNUAL WEEK and the INTERNATIONAL CONFERENCE ON ADVANCES IN SUSTAINABLE CONSTRUCTION MATERIALS AND STRUCTURES: a report**

By Daniela Ciancio, RILEM Implementation Manager

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## **When**

From Sunday 29 August 2021 to Friday 3 September 2021.

*Night view of downtown Merida. Image courtesy of A. Griffoin.*



## **Where**

Merida, Yucatan, Mexico.

## **Format**

Hybrid event (second of this kind in the RILEM history, after the 3<sup>rd</sup> RILEM Spring Convention in Guimaraes, Portugal, in 2020). Some sessions were hybrid, others were fully online. The conference organised eight segments bringing together the latest developments to promote quality assurance in construction materials and testing.

## **Organizing Committee Chairpersons:**

Pedro CASTRO-BORGES, Centro de Investigación y de Estudios Avanzados (CINVESTAV Unidad Mérida), México.

Alejandro DURÁN-HERRERA, Universidad Autónoma de Nuevo León (UANL), México.



*From the left: Prof. J. I. Escalante-Garcia, Prof. Ravindra Gettu, Prof. P. Castro-Borges and Prof. A. Duran-Herrera. Image courtesy of A. Griffoin.*

## **Scientific Committee Chairperson:**

José Iván ESCALANTE-GARCÍA, Centro de Investigación y de Estudios Avanzados (CINVESTAV Unidad Saltillo), México.

## **Some numbers of the conference**

Around 230 abstracts written by 770 authors from 31 countries; 13 plenary sessions and 16 parallel sessions. Around 60 conference delegates attended in person from Colombia, Nicaragua, France, USA, Argentina, México and Brazil. COVID incidents during the event: ZERO!

## **Doctoral courses**

[5 online courses](#) organised by Dr. Alejandro Durán Herrera, Universidad Autónoma de Nuevo León (UANL), México, and held from Monday 16 to Friday 27 August 2021.

## **Poster award**

At the 75th Annual RILEM Week, the [RILEM Best Student Poster Award](#) went to Dr Michelle Tiong, College of Civil Engineering, Hunan University, Changsha, China, for her poster titled “ACCELERATION CARBONATION OF DRY-MIX PRESSED CEMENT BLOCKS: A COUPLING EFFECT OF WATER-TO-CEMENT AND MOULDING PRESSURE”, co-authored by Xuemiao Li and Tung-Chai Ling. Michelle received a certificate and a 500 EURO prize issued by RILEM. Congratulations Michelle!



*Piece of art by Mexican artist Guido Farina given to the winners of the poster competition. Image courtesy of A. Griffoin.*

Six more students attending the RILEM PhD courses held before the 75th Annual Week received, in recognition of the quality of their posters, a piece of art designed by Mexican artist [Guido Farina](#). You can see the full list of winners [here](#). Congratulations to these students!

### Special gift

A special gift for the RILEM 75<sup>th</sup> Anniversary was presented by the organizers to 2019-2021 RILEM President Ravindra Gettu and RILEM Honorary Member Prof. Surendra Shah: an original creation by [Guidofarina](#) celebrating and honouring the 75 years of RILEM. The masterpiece will be displayed at RILEM headquarters in Paris.



*Special gift by Mexican artist Guidofarina celebrating and honouring the 75 years of RILEM. Image courtesy of [Guidofarina](#).*

### PhD grant

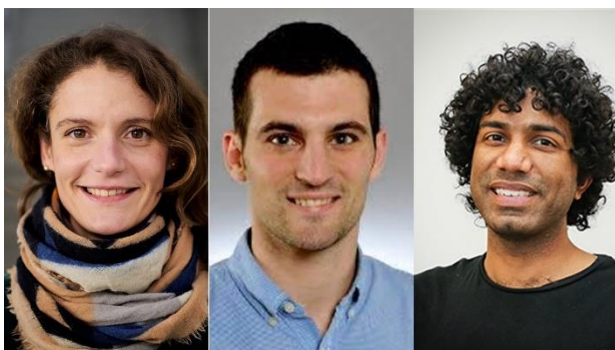
RILEM awarded three travel grants to PhD students less than 35 and coming from the countries where [discounted RILEM fees apply](#). The awardees were:

- Ms. Anusha Basavaraj, Indian Institute of Technology Madras, Chennai, India
- Ms. Dyana Joseline, Indian Institute of Technology Madras, Chennai, India
- Mr. Lautaro Santillan, Universidad Nacional de la Plata, La Plata, Argentina.

Congratulations to these students!

Due to Covid restrictions, Anusha and Dyana could not travel to Mexico to attend the 75<sup>th</sup> RILEM Annual Week, but they will use the grant to travel to the next onsite RILEM event. Lautaro, instead, managed to attend the conference in person.

## 2021 medallists



From the left: Klaartje De Weerd, Emilio Martínez-Pañeda, Prannoy Suraneni.

The 2021 RILEM medallists presented their work during the plenary sessions of the conference:

- "Chloride binding – investigations and knowledge gaps", [Klaartje de Weerd](#), University of Science and Technology, Norway, Robert L'Hermite Medallist.
- "Predicting the lifetime of infrastructure susceptible to hydrogen embrittlement and corrosion damage", [Emilio Martínez-Pañeda](#), Imperial College, UK, 2021 Gustavo Colonnetti Medallist.

- "Supplementary cementitious materials reactivity: From model systems to concrete", [Prannoy Suraneni](#), University of Miami, USA, 2021 Gustavo Colonnetti Medallist.

The recordings of these presentations will soon be available for free on the RILEM YouTube channel.

## TC presentations during the conference plenary sessions

- [TC 276-DFC](#) "Digital fabrication with cement-based materials", Nicolas ROUSSEL, Université Gustave Eiffel, FRANCE.
- [TC 274-TCE](#) "Testing and characterisation of earth-based building materials and elements", Antonin FABBRI, FRANCE.
- [TC 270-CIM](#) "Benchmarking Chloride Ingress Models on Real-life Case Studies: Theory and Practice", Eddie KOENDERS, Technical University Darmstadt, GERMANY.
- [TC 271-ASC](#): "Accelerated laboratory test for the assessment of the durability of materials with respect to salt crystallization", Barbara LUBELLI, TU Delft, THE NETHERLANDS.
- [TC 272-PIM](#) "Phase and Interphase behaviour of bituminous Material", Emmanuel CHAILLEUX, Université Gustave Eiffel, FRANCE.

The recordings of these presentations will soon be available for free on the RILEM YouTube channel.

## Other plenary lectures

- "Integrating reinforcement in digital fabrication with concrete", Viktor Mechtcherine, Institute of Construction Materials, TU Dresden, Germany.
- "Challenges in the implementation of performance-based design, quality assurance and best construction practices – the case of Mexico", Sergio Alcocer, Instituto de Ingeniería-UNAM, México.
- "Novel upcycling technique of recycling of cement paste powder by a two-step carbonation process", Chi Sun Poon, The Hong Kong Polytechnic University, Hong Kong.
- "Exciting new insights into competitive adsorption", Robert J Flatt, Institute of Building Materials, ETH Zürich, Switzerland.
- "An Introduction to ACI" and "Sustainability with Graphene based composites", Surendra P Shah, Northwestern University, USA.
- "Globe Consensus", Wolfram Schmidh, BAM, Germany.

## RILEM organization updates

- [2022-2025 RILEM Presidency](#): Nele De Belie: RILEM Vice-President; Nicolas Roussel: RILEM President; Ravindra Gettu: RILEM Outgoing President.

- 2022 RILEM Honorary President: Prof. Takafumi NOGUCHI, University of Tokyo, Japan.
- New TAC chair: Dr Enrico Sassoni, University of Bologna, Italy.
- New Cluster D convener: Dr. Anya VOLLPRACHT, RWTH, Germany.
- New Cluster E convener: Prof. Arun Menon, IIT Madras, India.
- Closed, numbered and newly established TCs: stay tuned as this info will be published soon!
- Upcoming RILEM events in 2022: 5<sup>th</sup> RILEM online Spring Convention “in” Paris, France, and 76<sup>th</sup> RILEM Annual Week in Kyoto, Japan.



*RILEM Publications corner at the conference venue. Image courtesy of A. Griffoin.*

### RILEM Publications

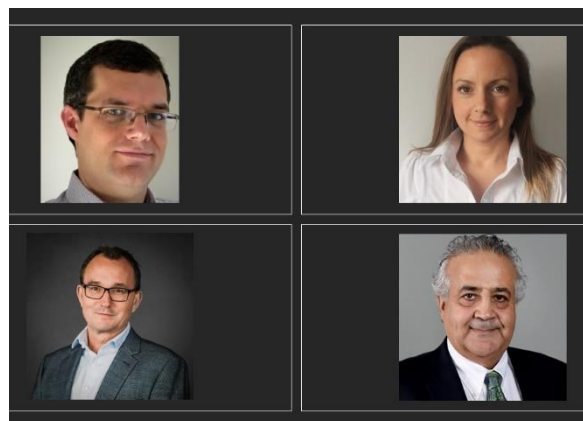
At the conference, the following RILEM publications were officially launched:

- The [RILEM 75<sup>th</sup> Anniversary book](#), that highlights the major changes of the association in the last two decades, presented during the event by Prof. Mark Alexander.
- The [2020-2021 RILEM Technical Report](#), containing the details of the activities of the RILEM Technical Committees over the last 12 months.

### 2021 RILEM Fellows

During the General Council meeting of the 75<sup>th</sup> RILEM Annual Week, the following [2021 RILEM Fellows](#) were nominated:

- Prof. John PROVIS, University of Sheffield, UK, RILEM Member since 2007 (top left in the image on the right).
- Prof. Alexandra BERTRON, INSA Toulouse, FRANCE, RILEM Member since 2005 (top right in the image on the right).
- Prof. Hans D. BEUSHAUSEN, University of Cape Town, SOUTH AFRICA, RILEM Member since 2002 (bottom left in the image on the right).
- Prof. Barzin MOBASHER, Arizona State University, USA, RILEM Member since 2003 (bottom right in the image on the right).



### Technical day

The last day of the conference was dedicated to the site visit of the [deep port in Progreso](#), Yucatán, an event that was organized for the joint celebration of the 75<sup>th</sup> anniversary of RILEM, the 80<sup>th</sup> anniversary of the old Progreso pier, that is a 6.5 km long stainless steel reinforced structure in the Gulf of Mexico, and the 150 years of the founding of the city of Progreso.

### Conference Proceedings

The conference Proceedings containing only some selected papers will be published soon by [Springer](#).

### Pictures, videos, food and laugh

These items will soon be available on the official 75<sup>th</sup> RILEM Week [website](#).