

## 74<sup>th</sup> RILEM Annual Week and 40<sup>th</sup> Cement and Concrete Science Conference Sheffield, UK, 31 August – 4 September 2020

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This is not yet another report of one of the many successful RILEM events. This is the report of "THE" RILEM event that has made history for its unique feature: the first fully-online RILEM Annual Week!

It was a tough decision to turn the 74<sup>th</sup> RILEM Annual Week and 40<sup>th</sup> Cement and Concrete Science Conference from an "in-person" to a "virtual" conference. At the RILEM Bureau meeting "in" Guimaraes in March 2020, the organisers were still contemplating the possibility of not changing anything and proceeding with the in-person gathering as announced earlier (Sept 2019). However, this nasty pandemic took its toll on the world forcing the organisers "to move the conference and all associated committee meetings to an online format".

The conference team, headed by Prof. John Provis, worked relentlessly (i.e., 240 hours/person in the 3 weeks before the kick-off, just to mention a figure) to ensure a smooth event and provide the best possible experience for all participants. This meant scheduling 119 presentations and managing 320 delegates connecting from different parts of the world in time zones that spanned from GMT+12 (New Zealand) to GMT-9 (Oregon, US).





Some members of the conference team that coordinated and managed all virtual sessions before and during the event.

Courtesy of Dan Geddes.

It also meant coordinating around 90 poster flash-presentations (4-min. long) that led to two awards, one given to the best poster in the "cement topics" category and one in the "topics other than cement" category. Congratulations to Natalia Pires Martins, ETH Zurich, and her winning poster titled "CSA cement synthesis from sulfidic mine tailings" and Magdalena Rajczakoska, Luleå Tech. U., and her winning poster titled "Improved self-healing blended mortars".

The event saw over 40 people attending most of the parallel sessions and more than 160 online attendants for the plenaries and keynotes. Delegates attending a session were able to ask questions at the end of each speech. Each presentation was pre-recorded to avoid possible connectivity problems but the presenters were always online during the session. Delegates had the opportunity to continue the chat with the presenters in special virtual reality rooms designed for this purpose, when the session ran out of time for Q&A.

The full-session recordings will be made available to all delegates. They will be password protected. Individual presentations will soon also be offered on the RILEM YouTube channel, provided that the speaker has given her/his consent to make the video accessible. Amongst these videos, it might be



worth mentioning that of the 2020 Robert L'Hermite medallist, Prof Tung Chai Ling, titled "Development in the active use of  $CO_2$  in wastes and cement for sustainable construction products" and that of Prof. Michael Havbro Faber about the recent RILEM initiative <u>GLOBE</u>: "The GLOBE consensus on sustainability in the built environment".



Shot screen of one of the Mozilla Hubs poster rooms, were all the poster were exposed and the authors available at certain time slots allocated to them to chat with the conference delegates. A real virtual-reality experience! Image courtesy of Dan Geddes.

At the conference, the following RILEM TCs, close to terminating their activities or nearly closing, presented their work:

256-SPF Spalling of concrete due to fire: Testing and modelling

258-AAA Avoiding Alkali Aggregate Reactions in concrete – Performance based concept.

**262-SCI** Characteristics of the steel/concrete interface and their effect on initiation of chloride-induced reinforcement corrosion

**261-CCF** Creep behavior in cracked sections of fiber reinforced concrete

264-RAP Asphalt pavement recycling

**259-ISR** Prognosis of deterioration and loss of serviceability in structures affected by alkali-silica reactions.

The event was also the opportunity to give visibility to the research outcomes of some PhD young students from emerging economies, awardees of the 2020 RILEM PhD grants. The list of the awardees and their research topics is available <a href="https://example.com/here">here</a>.

Looking behind the scenes, did you know that the 3-year old son of Prof Provis, "co-chaired" a plenary session? And that the conference email account was blocked for a couple of hours by Google by mistake on the day in which the conference kicked off? It is worth to mention the "aplomb" of Prof. Provis presenting at one of the RILEM Standing Committees only a few moments after he was notified about the (still unresolved at that moment) problem. His composure should be taken as example by everyone!





What are the reactions after the event? The general feeling is that a fully-online high-quality conference is possible. The warmth of the face-to-face chats at the coffee breaks was not there but the exchange of ideas and useful discussions with colleagues and peers were still guaranteed. From the organisers' point of view, the feedback is that pre-recorded lectures require a significant amount of work, especially if changes after the first submission are made but it is more than worth it as they ensure a tidy schedule... none of the sessions ran late "in" Sheffield!

The next RILEM Annual Week will be held in Mexico, in-person, we hope! Until then, stay safe and enjoy RILEM!