

Report of the 79th RILEM Annual Week and ICONS 2025

Hanoi, Vietnam, 22-29 August 2025

Vietnam is experiencing significant government investments in infrastructure projects, with a growing trend toward the use of high-performance and sustainable construction materials. In this context, the 79th RILEM Annual Week and ICONS 2025, on 22-29 August 2025 in Hanoi, Vietnam, was a key event offering network, collaboration and development opportunities. The event organisers from Hanoi University of Civil Engineering – HUCE, Vietnam Concrete Association – VCA, and Vietnam Institute for Building Materials – VIBM, created a perfect event: in particular, RILEM would like to acknowledge the work of Dr Tien Dung Nguyen, General Secretary of ICONS 2025, Prof. Van Tuan Nguyen, Chair of ICONS 2025 Scientific Committee, and Mrs. Thi Thuy Linh Le, member of ICONS 2025 Organizing Committee.

The event featured more than 200 attendants of the 4 pre-conference doctoral courses, 450 participants (around 25% of them were from Vietnam, the remaining 75% from 50 different countries), 11 keynote lectures in plenary session, 32 parallel sessions, 8 RILEM Technical Committee meetings, 270 peer-reviewed papers, 200 presentations... and much more! But let's start from the beginning.



Image courtesy of Khanh Ho.

Pre-conference doctoral courses

The 4 pre-conference courses held on 22 and 23 August took place at the Hanoi University of Civil Engineering – HUCE:

- Cement hydration, including supplementary cementitious materials, by Prof. Karen Scrivener
- 2. *Earthen construction*, by Dr. Christopher Beckett, Dr. Céline Perlot, Dr. Quoc-Bao Bui, and Prof. Antonin Fabbri
- 3. Asphalt Recycling, by Prof. Eshan Dave, Prof. Hassan Baaj and Prof. Gabriele Tebaldi
- 4. Durability of concrete, by Prof. Hans Beushausen.

Standing Committee meetings

On Sunday 24 and Monday 25 August, RILEM officers were kept busy by the Standing Committee meetings. Here comes an overview of the highlights of these meetings:

New Chairs



- Prof. Daman Panesar is the new TAC Chair, replacing Prof. Enrico Sassoni.
- Prof. Fernando Martinera is the new EAC Chair, replacing Prof. Karen Scrivener.
- Dr Niki Trochoutsou is the new RYC Chair, replacing Prof. Surender Singh.

New officers in TAC

- Prof. Liberato Ferrara is the new Cluster B Convener, replacing Prof. Josee Duchesne.
- Dr Augusto Connone Falchetto, Dr Tommaso D'Antino, Dr Burkan Isgor, Prof. Branko Savia, Dr Ruben Snellings and Prof. Gabriele Tebaldi are new TAC experts.

New officers in DAC

- Dr Emmanuel Chailleux is a new DAC expert.
- Dr Taehwan Kim is the new Regional Convener for the Pacific region, replacing Prof. Arnaud Castel.
- Prof. Ippei Maruyama is the new Japanese National Convener, replacing Prof. Takafumi Noguchi.

New officers in EAC

Prof. Keshav Bharadwaj and Prof. Franco Zunino are new EAC members.

New officers in RYC

Angela Tetteh (Deputy Chair), Prof. Keshav Bharadwaj (representative for the South Asia region), Dr Alina Galimshina (representative for the East Europe and Central Asia region), Samuel Armistead Dr (representative for the North America and Caribbean Trochoutsou. Image courtesy of region), Julian Camilo Guiterrez Rodrigueaz



On the left, Prof. Daman Panesar. On the right, Prof. Enrico Sassoni. Image courtesy of D. Ciancio.



On the left, Prof. Surender Singh. On the right, Dr Niki

(representative for the Latin America region), Dr Brenda Arias and Dr Joao Luis Parracha (representatives for the Europe region) are the new members of the RILEM Youth Council (RYC).

RILEM would like to thank the former Chairs and officers for their dedication and work.

New and closed TCs

- TC 294-MPA: Mechanical properties of alkali-activated concrete is now closed as it has terminated its work.
- One new TC has been approved; details will be provided soon here.

Meetings of RILEM TCs

The 79th RILEM Annual Week and ICONS 2025 provided the opportunity to have the meetings (in hybrid format) of the following TCs:

- MTZ Influence of Recycled Aggregates on Multi-Interfacial Transition Zones in Recycled Concrete
- 297-DOC Degradation of organic coating materials and its relation to concrete
- 298-EBD Test methods to evaluate durability of blended cement pastes against deleterious ions



- 317-ACP Active Control of Properties of Fresh and Hardening Cementitious Materials
- ASM Atomistic Simulations for Cement-Based Materials: Recommendations and link to Experiments
- CSA Calcium sulfoaluminate-based cement and concrete
- 322-MCB Mechanical Characterisation of Bamboo
- RCC Rolled compacted concrete for pavement applications.

Tuesday 26 August marked the official opening of the *International Conference on Advances in Engineering and Technology for Sustainable Development*, ICONS 2025, taking place at the National Convention Center. It was also the day in which typhon Kajiki made landfall bringing heavy rain and winds. Many roads in the city were flooded, but the organisers promptly turned the in-person morning session into a hybrid one, allowing the delegates to follow the event from the comfort (and dryness!) of their hotels.

Keynote presentations

The first keynote lecture of the event was delivered by Prof. Tommaso D'Antino, Politecnico di Milano, 2025 RILEM Robert L'Hermite medallist, on "Advances and open issues in the use of fibre-reinforced composites as reinforcement of existing and new concrete structures". Prof. D'Antino's lecture was 1 of 11 inspiring keynote presentations delivered during the plenary sessions of the conference by:

- Prof. Caijun Shi, on "Use of carbon mineralization for low/negative carbon high performance construction materials and products", presenting also the activities of the Asian Concrete Federation, RILEM partner.
- 2. Prof. Nele De Belie, on "Superabsorbent polymers as multifunctional admixture for sustainable cementitious compositions".
- 3. Prof. Ken Kawamoto, on "Japanese international Khanh Ho. technical cooperation to promote sound and sustainable reuse and recycling of construction and demolition waste (CDW) in Vietnam".
- 4. Prof. Hans Beushausen, on "The use of performance testing in service life prediction of reinforced concrete structures exposed to marine environments".
- 5. Prof. Chi Sun Poon, on "Innovations in low-carbon construction materials".
- 6. Prof. Guang Ye, on "Presentation of RILEM TC 294-MPA mechanical properties of alkali-activated concrete"; the recording of this presentation will soon be available on the RILEM YouTube Channel.
- 7. Prof. Tuan Ngo, on "Developing building materials for a circular and low carbon economy the role of ai and digital technologies".
- 8. Prof. Juan Li, on "Sustainable solutions of concrete", presenting also the activities of the NEXCEL, RILEM Partner.
- 9. Prof. Nicolas Roussel, on "Processing of cement-based materials".
- 10. Associate Prof. Trung Trung Le, on "Strategy for development of cement and concrete industry in Vietnam".



On the left, Prof. Enrico Sassoni.
On the right, Prof. Tommaso
D'Antino. Image courtesy of
Khanh Ho.



2025 RILEM PhD travel grant

Six PhD students from countries with low-medium GDP received a financial support to attend ICONS 2025. The selection was very competitive; the awardees were chosen for their motivational letters, CVs, and contribution to the conference. Congratulations to the following students:

- Monique Lunardi, Ph.D. candidate in Civil Engineering, University of São Paulo/USP, Brazil, presenting "Effectiveness of silane-siloxane hydrophobic treatment on low-carbon mortar in preventing carbonation-induced corrosion".
 - Prom the left: Akpabot Ifiok Akpabot,

 Bipina Thaivalappil, Sreelakshmi
 Srinivasan, Monique Lunardi, Laura
 Guzmán Chávez, Davies Chung Kok Yaw.

 Image courtesy of A. Martingale.
- 2. Bipina Thaivalappil, Doctoral Research Scholar, Image courtesy of A. Martingale. Indian Institute of Technology Madras, India, presenting "Development of low-carbon calcium sulfoaluminate-belite cement: raw material innovations and process-property relationships".
- 3. Davies Chung Kok Yaw, PhD Student, Monash University, Malaysia, presenting "Mechanical behaviour of sulphated cementitious binder as an alternative to portland cement".
- 4. Sreelakshmi Srinivasan, PhD Student, Indian Institute of Technology Madras, India, presenting "Effect of binder type & stress level on the passivation of prestressed concrete systems".
- 5. Laura Guzmán Chávez, PhD Student, Centro de Investigación y de Estudios Avanzados del IPN, Unidad Saltillo (Cinvestav), Mexico, presenting "Green alkaline cements from recycled concrete and fly ash".
- 6. Akpabot Ifiok Akpabot, PhD Student, Tongji University, China, presenting "Assessment of the flexural behavior of UHPC beams externally prestressed with FRP tendons".

RILEM Poster award

The winner of the RILEM Best Student Poster Award was Nghia P. Tran, for his poster titled "Effect of nano-ZnO on thermal-mechanical performance of alkali-activated materials for sensible heat storage".

Honorary members and fellows

Last but not least, the RILEM Honorary Members and Fellows for 2025! The following members were nominated RILEM fellows:

- Prof. Bernhard Hofko, Technisches Universität Wien, Austria
- Prof. Kei-Ichi Imamoto, Tokyo University of Science, Japan
- Dr Pierre Pimienta, CSTB, France
- Prof. Tomoki Shiotani, Kyoto University, Japan



Prof. Nele De Belie (in both images on the left), awarding the RILEM fellowship to and Dr Mateusz Wyrzykowski (on the left image) and Prof. Tomoki Shiotani (on the right image).

Image courtesy of Khanh Ho.



- Dr Prannoy Suraneni, University of Miami, USA
- Dr Mateusz Wyrzykowski, EMPA, Switzerland.

Prof. Mette Geiker, NTNU Norway, was elected 2025 RILEM Honorary member, for her dedication to the Association through her activities as Associate Editor of *Materials and Structures*, as Deputy-Chair of RILEM Technical Committees 209-RFC, 214-CCD and 262-SCI, as lecturer of several EAC doctoral courses, and member of many TCs. A posthumous RILEM honorary membership was given to Dr Esperanza Menendez Mendez, Cluster B convener, Chair of TC 300- ARM, Expert in TAC, Deputy Chair of TC 251-SRT, and active member of many other TCs.

Technical visit

The event ended on Friday 29 August with the technical visit of <u>Ecopark</u>, the first ecourban area in Vietnam and the <u>Vietnam Exhibition Fair Center</u>, one of the largest exhibition centers in the world.

RILEM events in 2026

The next RILEM gatherings will take place:

- in Ghent, Belgium, for the <u>RILEM Spring Convention & Conference on Innovative Construction Materials and Processes for Sustainable Buildings and Infrastructure</u>, on 13-17 April 2026;
- in Nairobi, Kenya, for the 80th RILEM Annual Week & RILEM International Conference, on 5-12 September 2026.

See you then!

The pictures of this event are available here until the end of November 2025.



From the left: Dr Tien Dung Nguyen, General Secretary of ICONS 2025, Prof. Van Tuan Nguyen, Chair of ICONS 2025 Scientific Committee, Mrs. Judith Hardy, RILEM General Secretary, Dr Nicolas Roussel, RILEM Outgoing President, Prof. Nele De Belie, RILEM President, Prof. Tung Hoang, 2025 RILEM Honorary President, Prof. Enrico Sassoni, TAC Chair, Prof. Hans Beauhausen, RILEM Vice-President. Image courtesy of Khanh Ho.