

# The RILEM Contributions of R. Douglas Hooton

Jason H. Ideker

Professor

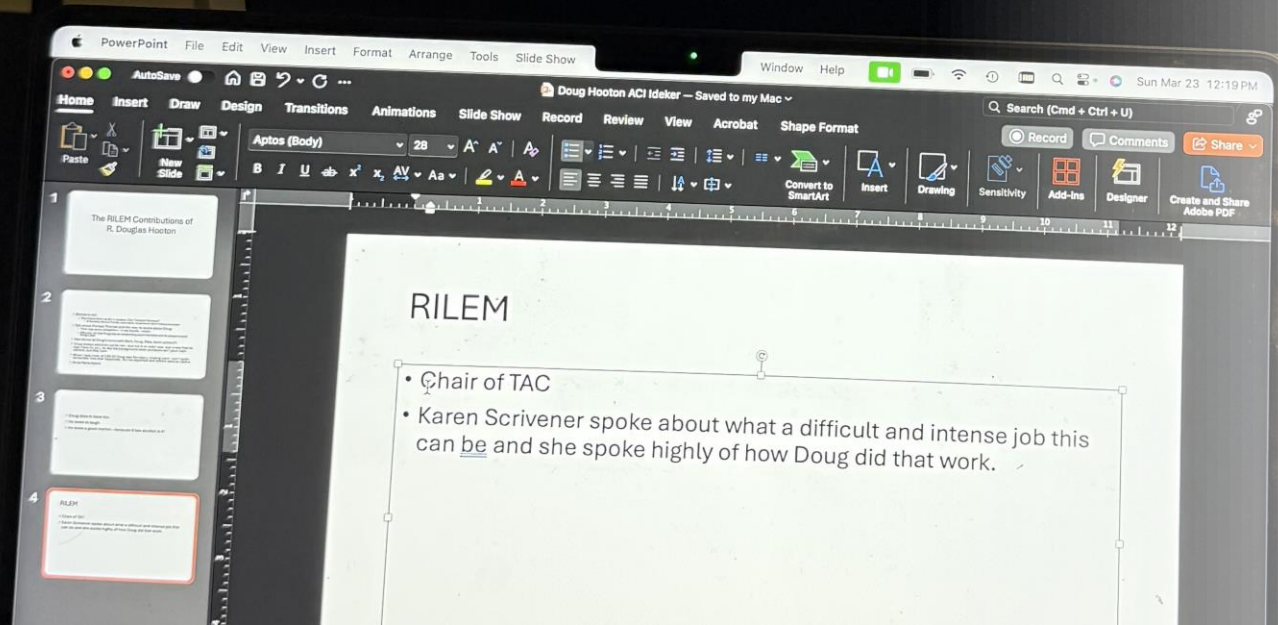
Oregon State University





- In honor of Doug this talk was assembled entirely:
  - in business class;
  - on international flights
  - one of them coming into his home airport of Toronto Pearson;
  - and on Star Alliance Airlines.

- AI was used to make this look fancy.





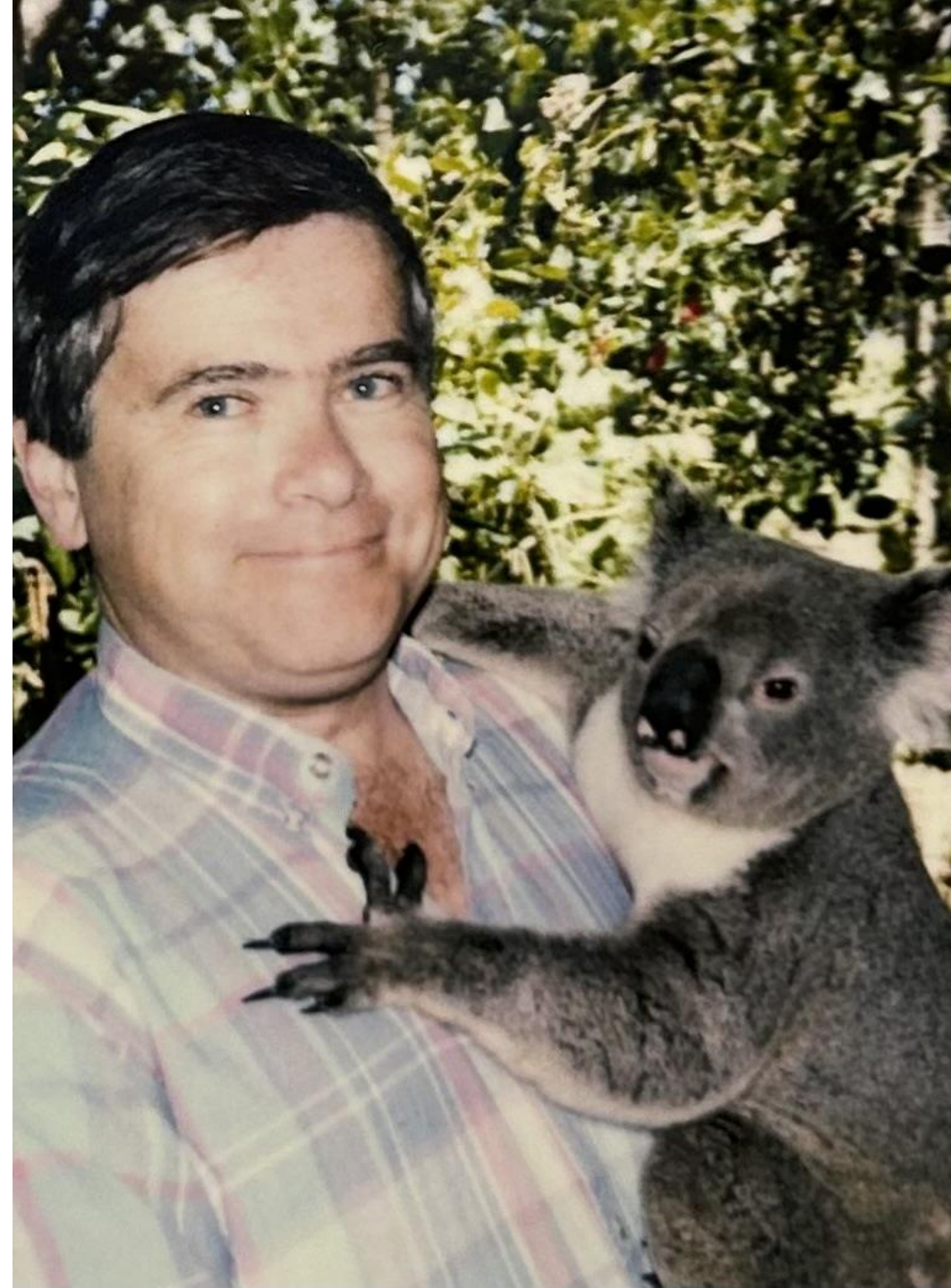


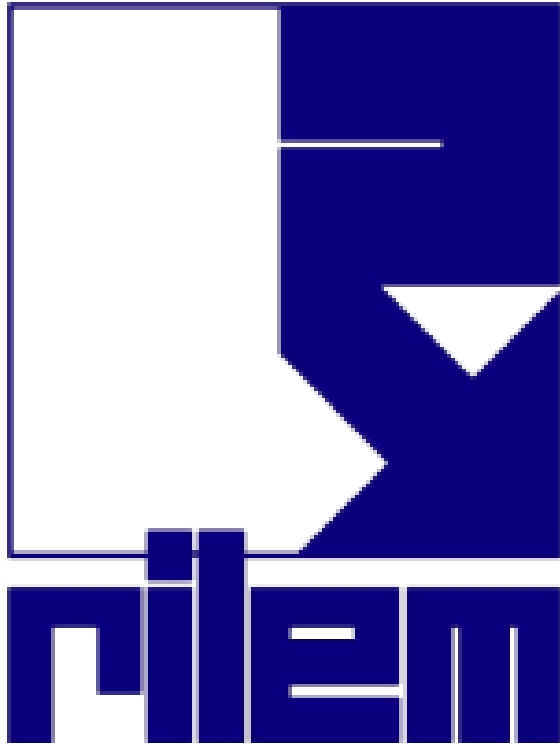
# Let's Celebrate!

The first time I really interacted with Doug was at Le Cheval Blanc in Montreal, Canada in 2006

- Doug likes to have fun.
- He loves to laugh.
- He loves a good martini
  - because it has alcohol in it!
- And on that note – I think a martini sounds really good.
- I'm gonna need a little help here...

- What could possibly be cuter, and fuzzier, and sweeter....
  - than Dougie?
- And what is RILEM?
- I'm so glad you're wondering.
- We will get there.





## The Mission

The mission of the association is to advance free-access scientific knowledge related to construction materials, systems and structures and to encourage transfer and application of this knowledge world-wide.

## The Goals

This mission is achieved through collaboration of leading experts in construction practice and science including academics, researchers, testing laboratories and authorities.

The three main goals of RILEM are:

- To 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 interdisciplinary and multidisciplinary cooperation at international scale by open access to advanced knowledge.

**International Union of Laboratories and Experts in Construction  
Materials, Systems and Structures**



# RILEM

- Member since 2000
- 72 hits if you search Doug's resume for "RILEM"
- Served on 25 Technical Committees
- Served on 4 RILEM Board Committees
- Chair of EAC
- Member of TAC (Chair?)
  - A challenging and intense role





# RILEM

- 2015 - Elected as Fellow of RILEM
- 2022 - Elected as Honorary Member of RILEM,
  - “for outstanding technical contributions to the advancement of science and dedication to the RILEM association,”
- 2022 - Outstanding Paper Award from the Editorial Board of Materials and Structures:

Validation of the R3 reactivity test across a wide range of materials, May 2022, Vol 55 (142), 16 pp. <https://doi.org/10.1617/s11527-022-01947-3>

Diana Londono-Zuluaga; Asghar Gholizadeh-Vayghan; Frank Winnefeld; François Avet; Mohsen Ben Haha; Susan A. Bernal; Özlem Cizer; Martin Cyr; Sabina Dolenc; Pawel Durdzinski; Lucija Hanzic; Johannes Haufe; **Doug Hooton**; Siham Kamali-Bernard; Xuerun Li; Alastair T. M. Marsh; Milena Marroccoli; Marusa Mrak; Yeakleang Muy; Cédric Patapy; Malene Pedersen; Serge Sabio; Simone Schulze; Ruben Snellings; Antonio Telesca; Anya Vollpracht; Guang Ye; Karen Scrivener

# RILEM Contributions on ASR

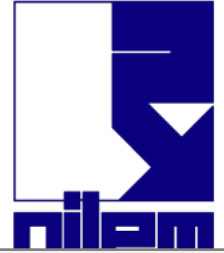
## **Current:**

- TC301-ASR Risk assessment of concrete mixture designs with alkali-silica reactive (ASR) aggregates (2020-) Co-Chair of SC2

## **Past**

- TC 219 ACS Alkali-Aggregate Reactions in Concrete Structures: Performance, Testing and Appraisal (2008-2013)
- TC 258 AAA Avoiding Alkali-Aggregate Reactions in Concrete (2014-2019)





WP1: Validating test methods

*Tri Quoc Phung & Joao Custódio*

T1: Evaluating existing AAR assessment schemes

*Tri, Alex Smith, Rene Brueckner and Ian Sims*

T2: Assessing AAR on the basis of concrete composition (incl.SCMs)

**Doug Hooton** & Ardalan Ghanizadeh

T3: Assessing various in-service exposure conditions

*Benoît Fournier & R.P. Martin*

WP2: Alkali inventory

*Doug Hooton & Tanja Manninger*

T1: Determining threshold alkali content for aggreg. incl. AAR-8

*T.F.Rønning, G. Plusquellec, Petter Hemstad*

T2: Determining the impact of SCMs on alkali inventory

*Andreas Leeman & Barbara Lothenbach*

T3: Assessing significance of external sources of alkalis

*Michal Glinicki & Ingmar Borchers*

RILEM TC 301 (ASR)

WP3: Risk assessment framework

*Cyrille Dunant & Yuichiro Kawabata*

T0: Finalize activities on initial data collection

*Cyrille Dunant & Y. Kawabata*

T1: Reviewing modelling approaches and their limitations

*Stéphane Multon & Y. Kawabata*

T2: Assessing representativeness and uncertainty of test results

*Y. Kawabata*

T3: Assessing variability going from lab to predict field

*Leandro Sanchez (link to TBD)*



# A few words on Doug's presence



ICAAR 2012 – Austin, Texas





Corvallis Workshops 2017, Oregon





100 Years of LMC and Karen's 60<sup>th</sup>,  
Lausanne, Switzerland





ICAAR 2022 – Lisbon, Portugal



# Don't forget the pandemic!







Who has your back?





- Doug loves a good joke (or 2)
- Doug loves cats (at least 3)
- Doug loves a good drink
  - (or  $x+1$ )\*
- And if you follow Doug on social media, like Instagram, you know he loves a good meme

So, we'll end with all of the above

