

PROGRAM SUMMARY

12th INTERNATIONAL CONFERENCE ON CONCRETE PAVEMENTS

2021

VIRTUAL EVENT! SEPTEMBER 27 - OCTOBER 1

ORGANIZED by:
International Society for Concrete Pavements

in conjunction with:
Minnesota DOT

National Road Research Alliance

Australian Society for Concrete Pavements

Transportation Research Board

and the
European Concrete Paving Association

SPONSORED by:
Lehigh Hanson

American Concrete Pavement Association

Cemex

“Making Waves with Durable, Resilient Concrete Pavements”

12TH ICCP WEBSITE: 12thiccp.concretepavements.org

FULL PROGRAM: <https://12thiccp.concretepavements.org/program/>

REGISTRATION: <https://12thiccp.concretepavements.org/register/>



Lehigh Hanson
HEIDELBERGCEMENT Group



WELCOME TO THE 12th ICCP 2021



The *International Society for Concrete Pavements (ISCP)* will hold the 12th International Conference on Concrete Pavements (12th ICCP 2021) September 27 to October 1, 2021, with the theme:

‘*‘Making Waves with Durable, Resilient Concrete Pavements’*’

The 12th ICCP was originally scheduled for August, 2020 at "The Depot" in Minneapolis, Minnesota, USA, but the global COVID-19 pandemic has continued to spread. Taking into account unprecedented health measures taken in countries around the world, international travel feasibility, and limited travel for U.S. state agencies, the 12th ICCP Organizing Committee worked diligently to find the best solution for conference attendees, venues, and the Society itself. Ultimately, the best decision was made for all involved to hold the 12th ICCP 2021 ONLINE!

ICCP has been held every 4 years since 1977. The twelfth conference 2021 will carry on the tradition of a series of international conferences begun in 1977 by Purdue University (#s 1-6), then subsequently hosted by ISCP, starting with 7th in 2001, in Orlando, Florida. The 12th ICCP 2021 will continue with the traditional focus—present information on new technologies related to the design, construction and rehabilitation of various concrete pavements. Targeted for those involved in any aspect of concrete pavement design, practicing research, construction, testing, evaluation, and rehabilitation including:

- Pavement, materials, & geotechnical engineers
- Federal, state, provincial, & municipal engineers
- Consulting engineers
- Contractors
- Material Suppliers
- Academia

ISCP is partnering with SB2 to utilize their virtual campus named "The Aggregate" to host this major international conference with:

- 100 technical presentations—(live and recorded) comprise comprehensive and current coverage on concrete pavement technology
- 10 four-hour workshops— unique online networking opportunities

Many agencies that regulate professional engineering registration have established continuing education requirements—

Professional Development Hours (PDHs)— as a condition for registration renewal.

Presentation and workshop attendance for the 12th ICCP 2021 should qualify for formal PDH credits (please check with your local registration board requirements to confirm). PDH reporting is on an "on-your-honor" basis and registrants are responsible for maintaining their own records. A form will be provided to 12th ICCP attendees for use in maintaining a record of the PDH units earned at this conference.

As we all look forward to a future filled with normalcy and face-to-face opportunities, ISCP will host the

13th ICCP 2024
August 25-29, 2024

in person at "The Depot" Minneapolis-Mn, USA

In the meantime, for questions regarding the conference, please contact us at:
conference@concretepavements.org

IMPORTANT LINKS:

12th ICCP WEBSITE:

12thiccp.concretepavements.org

FULL PROGRAM:

<https://12thiccp.concretepavements.org/program/>

REGISTER:

<https://12thiccp.concretepavements.org/register/>

EXHIBITORS:

<https://12thiccp.concretepavements.org/exhibitor-opportunities/>

SPONSORS:

<https://12thiccp.concretepavements.org/conference-sponsors/>

REGISTRATION

To promote a wide-reaching international audience, 12th ICCP 2021 registration prices:

USD \$ 80.00 for the first 1,000 registrants

USD \$120.00 after 1,000th registration has been reached

To REGISTER, please click here; on each page of this Program Summary; or go to the 12th ICCP Website registration page and click the button at the bottom of the page:
<https://12thiccp.concretepavements.org/register/>

All papers must have **at least one author registered for your manuscript to be published** in the proceedings.

Refunds: Cancellations by September 1, 2021 will be fully refunded

No refunds after September 1, 2021: Instead, ISCP will provide access to proceedings + materials.

PROGRAM SUMMARY

For the **FULL PROGRAM**, please go to: <https://12thiccp.concretepavements.org/program/>

MONDAY, SEPTEMBER 27, 2021

PLENARY SESSION: Cement Auditorium



6:00 AM Los Angeles | 9:00 AM New York
2:00 PM London | 4:00 PM Nairobi | 6:30 PM Mumbai
9:00 PM Beijing | 11:00 PM Brisbane

Conference Welcome

Jacob Hiller

The Aggregate Orientation

SB2 representative

<https://12thiccp.concretepavements.org/venue/>

Concrete Pavement Resilience

Leif Wathne

Honorary Members Induction

Inductees

Neeraj Buch (USA)

Dale Harrington (USA)

Bryan Perrie (SO.AFRICA)

Ram Kanwar Jain (INDIA)

Carlos Jofré (SPAIN)

– posthumously

Presented by

Jacob Hiller (USA)

Jeff Roesler (USA)

Peter Taylor (USA)

Michael Darter (USA)

Rafael Rueda (SPAIN)

Future for Concrete Pavements

Jeffery Roesler

Break

7:45 AM Los Angeles | 10:45 AM New York

3:45 PM London | 5:45 PM Nairobi | 8:15 PM Mumbai

10:45 PM Beijing | 12:45 AM⁺¹ Brisbane

PODIUM SESSIONS

8:00 AM Los Angeles | 11:00 AM New York
4:00 PM London | 6:00 PM Nairobi | 8:30 PM Mumbai
11:00 PM Beijing | 1:00 AM⁺¹ Brisbane

PODIUM SESSION 1: Cement Auditorium

Airfields: Moderator Greg Dean, Carolinas Concrete Paving Association-ACPA-SE

PODIUM SESSION 2: Water Auditorium

Moisture Effects:

Moderator Yating Zhang, Jiangnan University

PODIUM SESSION 3: Sand Auditorium

LCA: Moderator Luc Rens, Febelcem

Networking and Break

9:45 AM Los Angeles | 12:45 PM New York

5:45 PM London | 7:45 PM Nairobi | 10:15 PM Mumbai

12:45 AM⁺¹ Beijing | 2:45 AM⁺¹ Brisbane

WORKSHOPS

11:00 AM Los Angeles | 2:00 PM New York
7:00 PM London | 9:00 PM Nairobi | 11:30 PM Mumbai
2:00 AM⁺¹ Beijing | 4:00 AM⁺¹ Brisbane

WORKSHOP 1: Conf. Hall A

Internal Curing for Concrete Pavements

(Sponsored by ESCSI)



WORKSHOP 2: Conf. Hall B

Design and Evaluation of Rigid Airfield Pavements

(Sponsored by FAA)



TUESDAY, SEPTEMBER 28, 2021

WORKSHOPS

6:00 AM Los Angeles | 9:00 AM New York
2:00 PM London | 4:00 PM Nairobi | 6:30 PM Mumbai
9:00 PM Beijing | 11:00 PM Brisbane

WORKSHOP 3: Conf. Hall A
Fiber-Reinforced Concrete
Materials for Pavements
(Sponsored by FRCA)



WORKSHOP 4: Conf. Hall B
Sustainability of Cement
and Concrete Materials
(Sponsored by FHWA)



Networking and Break

9:45 AM Los Angeles | 12:45 PM New York
5:45 PM London | 7:45 PM Nairobi | 10:15 PM Mumbai
12:45 AM+1 Beijing | 2:45 AM+1 Brisbane

PODIUM SESSIONS

11:00 AM Los Angeles | 2:00 PM New York
7:00 PM London | 9:00 PM Nairobi | 11:30 PM Mumbai
2:00 AM+1 Beijing | 4:00 AM+1 Brisbane

PODIUM SESSION 4: Cement Auditorium
Overlays, Part 1:
Moderator Neeraj Buch, Michigan State University

PODIUM SESSION 5: Water Auditorium
Built and Novel Environment:
Moderator Tim Smith, CAC

PODIUM SESSION 6: Sand Auditorium
Geotechnical Aspects:
Moderator Bernard Izevbehai, MnDOT

Break

12:45 PM Los Angeles | 3:45 PM New York
8:45 PM London | 0:45 PM Nairobi | 12:30 AM+1 Mumbai
3:45 AM+1 Beijing | 5:45+1 Brisbane

PODIUM SESSIONS

1:00 PM Los Angeles | 4:00 PM New York
9:00 PM London | 11:00 PM Nairobi | 1:30 AM+1 Mumbai
4:00 AM+1 Beijing | 6:00 AM+1 Brisbane

PODIUM SESSION 7: Cement Auditorium
Overlays, Part 2:
Moderator Eric Ferrebee, ACPA

PODIUM SESSION 8: Water Auditorium
Long-Life Pavements:
Moderator Tim Smith, CAC

PODIUM SESSION 9: Sand Auditorium
Case Studies: Moderator Jake Hiller, Michigan Technological University

WEDNESDAY, SEPTEMBER 29, 2021

PODIUM SESSIONS

6:00 AM Los Angeles | 9:00 AM New York
2:00 PM London | 4:00 PM Nairobi | 6:30 PM Mumbai
9:00 PM Beijing | 11:00 PM Brisbane

PODIUM SESSION 10: Cement Auditorium
CRCP Case Studies:

Moderator Anna-Carin Brink, Arup

PODIUM SESSION 11: Water Auditorium
Freeze-Thaw Durability:

Moderator Jeffery Roesler, University of Illinois

PODIUM SESSION 12: Sand Auditorium

Policy: Moderator Todd LaTorella, MO/KS Chapter-ACPA

Break

7:45 AM Los Angeles | 10:45 AM New York
3:45 PM London | 5:45 PM Nairobi | 8:15 PM Mumbai
10:45 PM Beijing | 12:45 AM+1 Brisbane

PODIUM SESSIONS

8:00 AM Los Angeles | 11:00 AM New York
4:00 PM London | 6:00 PM Nairobi | 8:30 PM Mumbai
11:00 PM Beijing | 1:00 AM+1 Brisbane

PODIUM SESSION 13: Cement Auditorium
Optimization:
Moderator Manik Barman, University of Minnesota Duluth

PODIUM SESSION 14: Water Auditorium
Sustainable Materials:
Moderator Angela Folkestad, ACPA

PODIUM SESSION 15: Sand Auditorium
Specifications:
Moderator James Krstulovich, IDOT

Networking and Break

9:45 AM Los Angeles | 12:45 PM New York
5:45 PM London | 7:45 PM Nairobi | 10:15 PM Mumbai
12:45 AM+1 Beijing | 2:45 AM+1 Brisbane

WORKSHOPS

10:00 AM Los Angeles | 1:00 PM New York
6:00 PM London | 8:00 PM Nairobi | 10:30 PM Mumbai
1:00 AM+1 Beijing | 3:00 AM+1 Brisbane

WORKSHOP 5: Conf. Hall A
Continuously Reinforced
Concrete Pavements
(Sponsored by CRSI)



WORKSHOP 6: Conf. Hall B
Performance-Engineered Mixtures
(Sponsored by NCPTC)



THURSDAY, SEPTEMBER 30, 2021

PODIUM SESSIONS

6:00 AM Los Angeles | 9:00 AM New York
2:00 PM London | 4:00 PM Nairobi
6:30 PM Mumbai | 9:00 PM Beijing | 11:00 PM Brisbane

PODIUM SESSION 16: Cement Auditorium

Precast and Rapid Construction:

Moderator Leif Wathne-ACPA

PODIUM SESSION 17: Water Auditorium

Functional Evaluation:

Moderator Erwin Kohler, 3ipe

PODIUM SESSION 18: Sand Auditorium

RCC and Heavy Loads:

Moderator Corey Zollinger, CEMEX

Break

7:45 AM Los Angeles | 10:45 AM New York
3:45 PM London | 5:45 PM Nairobi | 8:15 PM Mumbai
10:45 PM Beijing | 12:45 AM⁺ Brisbane

PODIUM SESSIONS

8:00 AM Los Angeles | 11:00 AM New York
4:00 PM London | 6:00 PM Nairobi | 8:30 PM Mumbai
11:00 PM Beijing | 1:00 AM⁺ Brisbane

PODIUM SESSION 19: Concrete Auditorium

Modeling:

Moderator Hassan Baaj, University of Waterloo

PODIUM SESSION 20: Water Auditorium

Joint Quality: Moderator Tom Burnham, MnDOT

PODIUM SESSION 21: Sand Auditorium

Pavement ME: Moderator Mick Prieur, Englobe

Networking, Break, and



THE STUDENT PITCH

Student Networking Session

<https://12thiccp.concretepavements.org/studentpitch/>

The Beach Concert Stage

9:45 AM Los Angeles | 12:45 PM New York
5:45 PM London | 7:45 PM Nairobi | 10:15 PM Mumbai
12:45 AM⁺ Beijing | 2:45 AM⁺ Brisbane

Coordinators: Sushobhan Sen, University of Pittsburgh and Lucio Salles, University of Pittsburgh

WORKSHOPS 7 & 8 (above-next column)

11:00 AM Los Angeles | 2:00 PM New York
7:00 PM London | 9:00 PM Nairobi | 11:30 PM Mumbai
2:00 AM⁺ Beijing | 4:00 AM⁺ Brisbane

WORKSHOP 7: Conf. Hall A

RCC Pavements Technology for Roads and Industrial Sites

(Sponsored by RCC Pavement Council)



WORKSHOP 8: Conf. Hall B

Precast Concrete Pavements

(Sponsored by NPCA)



FRIDAY, OCTOBER 1, 2021

WORKSHOPS

6:00 AM Los Angeles | 9:00 AM New York
2:00 PM London | 4:00 PM Nairobi | 6:30 PM Mumbai
9:00 PM Beijing | 11:00 PM Brisbane

WORKSHOP 9: Conf. Hall A

Design of Industrial Concrete Pavement Systems

(Sponsored by PNA)



WORKSHOP 10: Conf. Hall B

Pavement Preservation

(Sponsored by IGGA)



PODIUM SESSIONS

10:00 AM Los Angeles | 1:00 PM New York
6:00 PM London | 8:00 PM Nairobi | 10:30 PM Mumbai
1:00 AM⁺ Beijing | 3:00 AM⁺ Brisbane

PODIUM SESSION 22: Cement Auditorium

Thin Pavements:

Moderator Sherry Sullivan, Forta

PODIUM SESSION 23: Water Auditorium

Construction Practices:

Moderator John Becker, ACPA

PODIUM SESSION 24: Sand Auditorium

Curing and Repair:

Moderator Peter Taylor, Iowa State University

AWARDS CEREMONY & WRAP-UP

12:00 PM Los Angeles | 3:00 PM New York
8:00 PM London | 10:00 PM Nairobi | 12:30 AM⁺ Mumbai
3:00 AM⁺ Beijing | 5:30⁺ Brisbane

Introduction

Jacob Hiller, Michigan Technological University

ICCPs have a long history of excellence in technology transfer and a highlight of awards granted to the best of several categories which the 12th ICCP 2021 will continue during the Friday Ceremony:

- **Bengt F. Friberg Award** for Outstanding Paper by a Young Author
- **ACPA Robert G. Packard Award** for Design or Design Innovations for Concrete Pavement
- **Eldon J. Yoder Award** for Outstanding Paper

Conference Wrap-Up

Jacob Hiller, Michigan Technological University

ICCP Awards information and previous recipients:

<https://12thiccp.concretepavements.org/awards/>



ORGANIZING COMMITTEE

- Jake Hiller Conference Chair & ISCP President
- Leif Wathne Sponsorship & Past Chair
- Corey Zollinger Finance
- Tim Smith Past Chair
- Bernard Izevbekhai Student Competition
- Tom Burnham Local Organizing Chair
- Armen Amirkhanian Technical Program & Paper Review
- Jeff Roesler Workshop Co-Coordinator & ISCP Past President
- Nadine Murray Ex-Officio
- Peter Taylor Workshop Co-Coordinator
- Sushobhan Sen Student Pitch Coordinator
- Lucio Salles Student Pitch Coordinator



HILLER WATHNE ZOLLINGER SMITH IZEBEKHAI BURNHAM



AMIRKHANIAN ROESLER MURRAY TAYLOR SEN SALLES

For all of our dedicated Committee Members' bios, please go to the ORGANIZING COMMITTEE page: <https://12thiccp.concretepavements.org/planning/>

ORGANIZERS

ORGANIZED by:
International Society for Concrete Pavements
 in conjunction with:

Minnesota DOT; National Road Research Alliance; Australian Society for Concrete Pavements Transportation Research Board and the European Concrete Paving Association



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REGISTRATION: <https://12thiccp.concretepavements.org/register/>

CONFERENCE SPONSORS



The *International Society for Concrete Pavements (ISCP)* is extremely grateful for the steadfast sponsorship of the conference and workshops provided by the following organizations. These organizations have been patient with the Society as we navigate the best path to provide high-quality technology transfer opportunities for our field during difficult times these past 2 years.

For the **SPONSORSHIP WEB PAGE**, please go to:

<https://12thiccp.concretepavements.org/conference-sponsors/>

For questions or more information on being a **SPONSOR** of the

12th International Conference on Concrete Pavements (12th ICCP)

or future events, please contact:

Leif Wathne | Sponsorship & Past Chair - 12th ICCP

Phone: +1.202.638.2272

E-mail: conference.sponsorships@concretepavements.org



WORKSHOP SPONSORS



