



















ISCP GRATEFULLY ACKNOWLEDGES THE CONTRIBUTIONS OF ITS SPONSORS, EXHIBTORS, & COLLABORATORS, INCLUDING THE FOLLOWING:

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PROGRAM AT A GLANCE

THURSDAY AUGUST 29		★ FIELD TRIPS/SITE VISITS	MnROAD MnROAD	Ministral Minneanolis	Pavements City of Lakes										🖈 Transportation Provided
	EXHIBIT HALL OPEN												\$		
WEDNESDAY AUGUST 28	BREAKFAST - Depot Pavilion	PODIUM SESSIONS 9, 10 PODIUM SESSIONS 11, 12				LUNCH - Depot Pavilion	PODIUM SECONS SA		PODIUM			★ AWARDS BANQUET AND RIVER CRUISE Stillwater Riverboats			
	EXHIBIT HALL OPEN												g E	ı la	
TUESDAY AUGUST 27	BREAKFAST - Depot Pavilion	BREAKFAST - Depot Pavilion PARALLEL WORKSHOPS 1-5					PARALLEL WORKSHOPS 6-10					* BBQ RECEPTION American Engineering Testing St. Paul			
	EXHIBIT HALL OPEN												BITOR		SORED
MONDAY AUGUST 26	BREAKFAST - Depot Pavilion	PENARY SESSION WIRTGEN GROUP PODIUM SESSIONS 1, 2, 3				LUNCH - Depot Pavilion	PODIUM SESSIONS 4, 5, 6 PODIUM SESSIONS 7, 8						WINNESOTA TWINS vs. ATLANTA BRAVES regents Landing Target Field		
							ехнівітов зетир			(3					
SUNDAY AUGUST 25							REGISTRATION OPEN THROUGH WEDNESDAY					WELCOME RECEPTION Mill City Museum			
TIME	7:00am	3:00am	9:00am	0:00am	1:00am	2:00pm	:00pm	2:00pm	3:00pm	4:00pm	5:00pm	9:00pm	7:00pm	3:00pm	9:00pm



SUNDAY, AUGUST 25

11:30-16:00 REGISTRATION PAVILION FOYER
11:30-16:00 SPOUSE/GUEST HOSPITALITY ROOM

EMPIRE BUILDER

GROUP

13:00-17:00 EXHIBITOR SET UP DEPOT PAVILION

13:00-16:00 SPEAKER READY ROOM ALEX. MITCHELL

For speakers in Plenary and Podium Sessions

18:00-20:00 WELCOME RECEPTION MILL CITY MUSEUM

(5-minute walk from THE DEPOT)

Sponsored by Otto Alte-Teigeler GmbH

MONDAY, AUGUST 26

7:00-8:00 BREAKFAST DEPOT PAVILION

7:00-16:00 SPEAKER READY ROOM ALEX. MITCHELL

8:00-9:45 PLENARY SESSION GREAT NORTHERN

Sponsored by the Wirtgen Group

Conference Welcome

Tom Burnham, 13th ICCP Chair

Welcome to Minnesota!

<u>Jean Wallace</u>/ <u>Michael Beer</u>, MnDOT

Remarks on ISCP

Jake Hiller, ISCP President

Remarks from EUPAVE

Luc Rens, EUPAVE

Remarks from ASCP

Craig Heidrich, Australian Society for Concrete Pavements

Remarks from FHWA

Gina Ahlstrom, Federal Highway Administration

Summary of 5th Advanced Workshop on Concrete Pavements

Julie Vandenbossche/ Lev Khazanovich, Univ. of Pittsburgh

ISCP Honorary Member Inductions:

Dr. Anna-Carin Brink and Dr. Rolf Breitenbücher

Jake Hiller, ISCP President

Keynote Lecture: Innovative Paths Toward Lower Carbon in Concrete Payements

Andrew Minson, Global Cement and Concrete Association

Closing, Orientation, and Housekeeping

Tom Burnham, 13th ICCP Chair

9:45-10:15 BREAK DEPOT PAVILION



10:00-17:00 SPOUSE/GUEST HOSPITALITY ROOM EMPIRE BUILDER

10:15-12:00 SESSION 1: LOWER CARBON

GREAT NORTHERN

Lifecycle Assessment and Sensitivity Analysis of Roller Compacted Concrete, Plain Jointed Concrete, and Hot Mix Asphalt Pavements

Haoran Li

Barriers Limiting Innovation in Concrete Carbon Reduction Sarah Lopez

Examining Effect of Carbon-Enriched Fly Ash on Microstructural Development of Portland-Limestone-Based Cement Mortars Erin Stewartson

Sensitivity of Concrete's Embodied Carbon Emissions to Cement Direct Carbon Intensity and Material Transportation Michelle Cooper

10:15-12:00 SESSION 2: TESTING AND INSTRUMENTATION 1
HIAWATHA

Quantifying Slab Movements in Concrete Pavements Through Magnetic Induction Sensors

Michael Wallace

Laboratory and Full-Scale Experiment of A Novel Hybrid System to Harvest Energy Through Concrete Pavement

Eric Gennesseux

Full-Scale Rigid Pavement Traffic Test at the FAA National Airport Pavement Test Facility – Construction Cycle 8

Dan Offenbacker

Embedded Resistivity Sensor for Concrete Materials and Structures: Vision and Prototype

Nima Kargah-Ostadi

10:15-12:00 SESSION 3: DESIGN SOUTHERN PACIFIC

Load Transfer and Joint Performance in Whitetopping Pavements: Concrete Overlay

Dhritee Diksha Baroowa

Theoretical Comparison of Post Tensioned Concrete And Jointed Plain Concrete for Rigid Airport Pavements

Greg White

Employing Field Energy Attenuation in Portland Cement Concrete Pavements as a Design Parameter

Carl A. Lenngren

Artificial Neural Networks for Mechanistic-Empirical Concrete Pavement Design: An Efficient Development Approach

Haoran Li



12:00-13:00 LUNCH

13:00-14:45 SESSION 4: PERFORMANCE MODELING 1

GREAT NORTHERN

Long-Term Performance of CRCP Over OGDL in Illinois

Shafkat Alam-Khan

Small-Scale Accelerated Load Test for Doweled Jointed Plain Concrete Pavement

Charles Donnelly

Dynamic Back-Calculation for Evaluating Structural Degradation of Transverse Joint in Concrete Pavement

Tatsuo Nishizawa

The Development of Reconfigured Bond Slip Model Coefficients for CRC Pavement Based on Pull-Out Testing

Myungjin Seong

13:00-14:45 SESSION 5: SURFACE CHARACTERISTICS HIAWATHA

A Practical Approach to Predict the "In-Situ" Noise Absorption of Porous Pavement Materials

TRD

Sustainable Concrete Highway Pavement Thickness Design: The Role of Diamond Grinding

James Walker

High Performance Surface Textures for Concrete Pavements
Designed According to Requirements

Tim Alte-Teigeler

New Belgian Guidelines for Pattern Imprinted Concrete
Pavements

Luc Rens

13:00-14:45 SESSION 6: SUSTAINABILITY AND

CLIMATE CHANGE

SOUTHERN PACIFIC

Sustainability of Ultra-Thin Concrete Pavements in Low Volume Roads

Juan Pablo Covarrubias

Development of a Permeable Removable Urban Pavement for a Higher Sustainability

Thierry Sedran

Concrete Repairs on National Road N1-19&20 Klein Rietspruit to Old Potch, South Africa

Anna-Carin Brink

An Overview of the Potential of Concrete Pavements in Turkey to Combat Climate Change

İsmail Özgür Yaman



14:45-15:15 BREAK DEPOT PAVILION

14:45-15:15 STUDENT POSTER SETUP CONSERVATORY

15:15-17:00 SESSION 7: SUSTAINABILITY

GREAT NORTHERN

Opportunities for Further Sustainable Practices in Concrete Pavement Design in Australia

George Vorobieff

Buried Treasure: Uncovering Concrete Pavement for Extended Performance and Enhanced Sustainability

Prashant Ram

Life Cycle Assessment of Concrete Overlay Strategies

Dan King

Pervious (Lean) Concrete for Sustainable Road Pavements: Results of the Belgian Be-Drain Project

Audrey Van der Wielen

15:15-17:00 SESSION 8: TESTING AND

INSTRUMENTATION 2 HIAWATHA

Effect of Freeze Thaw And Substrate Moisture Condition on the Concrete Repair-Substrate Interface

Md Hasibul Hasan Rahat

Automated 3D Quantification of Concrete Pavement Joint Damage

Quang Tran

In-Situ Performance Evaluation of Glass Fiber Reinforced Polymer (GFRP) Dowel Bars

Mehdi Parvini

Field Moisture Monitoring of Foundation Layers of Innovative Rigid Pavement Systems

Ceren Avdin

15:15-17:00 STU

STUDENT POSTER SESSION



Sponsored by the Cement Association of Canada

CONSERVATORY



The prestigious *B.F. McCullough Award* will be awarded to the best student poster and is named after Professor B. Frank McCullough, *University of Texas-Austin*. Dr. McCullough was a concrete pavement engineering pioneer in the U.S. and was named an Honorary Member of ISCP in the Charter Class of 2001. During his time at the University, Professor McCullough was responsible for the conduct of more than 100 research projects, teaching, and advising more than 100 graduate students for nearly 50 years.



1 - Parameters for Thin FRC Concrete Pavements

Etienne Beya Nkongolo - University of Missouri-Kansas City

2 - Performance Engineered Mixtures for Concrete Airfield Pavements

Isaac Oyawoye - UNC Charlotte

3 - Feasibility of Manufactured Sand in Engineered Cementitious Composites for Rigid Pavement

Chintada Chandrasekhar - IIT Roorkee

4 - Assessment of thermochromic and reflective UHI mitigation strategies for concrete pavements

Richa Bhardwai - University of Illinois at Urbana Champaign

5 - Joint Design Optimization

Megan Darnell - University of Pittsburgh

6 - Assessing Slab-Base Bond with MIRA (Ultrasonic phase array)

<u>Jesus Castro Perez</u> - University of Illinois at Urbana Champaign **7 - Field Evaluation of Nontraditional and Natural Pozzolans (NPs)**

in Concrete for Pavement Applications

<u>Alberto Castillo</u> - Purdue University

8 - Improving Pavement Sustainability and Resilience: A

Pavement Life Cycle Cost Analysis Case Study

Matthew Sheffield - UNC Charlotte

9 - Evaluation of Steel Depths on the Performance of Continuously Reinforced Concrete Pavement

Hee Jun Lee - Texas Tech University

10 - Evaluating Expertise of Concrete Pavement Construction in Modern Large Language Models

Mason Smetana - University of Pittsburgh

11 - Relationship Between Transverse Joint Faulting and Joint Performance Parameters for Thin FRC Concrete Pavements
Rohith Sabu - University of Minnesota - Duluth

12 - Enhancing Safety in Construction Work Zones Through
Concrete Pavement-Embedded Passive Sensing Technologies

Apidej Sakulneya - University of Illinois at Urbana Champaign

13 - ChatGPT Biases Toward Asphalt Pavements

<u>Igor Sukharev</u> - University of Pittsburgh

14 - Utilizing Non-Standard Aggregates in Concrete Pavement<u>Makorogo Barugahare</u> - University of Alabama

15 - Early Performance Evaluation of CRCP Bonded Overlay on JCPs

Niwesh Koirala - Texas Tech University

16 - Synergistic Effects of Freeze/Thaw Cycles and Seawater on Chloride Ingress in Concrete

Md Hasibul Hasan Rahat - Virginia Tech

17 - Mechanistic-Based RCC Pavement Mix Design Framework

Jordan Ouellet - University of Illinois at Urbana Champaign



18:40-21:00 EXHIBITOR

SPONSORED

MINNESOTA TWINS VS. ATLANTA BRAVES

BASEBALL GAME TARGET FIELD

15-20 min walk from DEPOT (Ticket holders only)

Sponsored by 13th ICCP Exhibitors

TUESDAY, AUGUST 27

7:00-8:00 BREAKFAST DEPOT PAVILION

8:00-12:00 WORKSHOP 1: RAPID STRENGTH CONCRETE

FOR HIGHWAYS AND AIRPORT PAVEMENTS

Sponsored by CTS Cement

GREAT NORTHERN

8:00 Welcome and Overview

Julio Paniagua (CTS Cement Manufacturing Corporation)

8:15 Introduction to Materials Used for RSC Pavement

Eric Bescher (University of California Los Angeles - UCLA)

8:45 Design, Construction Practices and Specifications

Matt Ross (CTS Cement Manufacturing Corporation)

9:15 DOT Applications

<u>Dulce Rufino Feldman</u> (California Department of Transportation – Caltrans)

9:45 Break (30 min)

10:15 Research Case Study, Heavy Vehicle Simulator Testing of Thin Concrete Overlay on Asphalt Made with Belitic Calcium Sulfoaluminate Cement

Angel Mateos (University of California Berkeley)

10:45 Large-Scale Field Project using Ready Mix Concrete Production

Julio Paniagua (CTS Cement Manufacturing Corporation)

11:15 Airport Applications

<u>Christopher Senseney</u> (University of Colorado Boulder)

11:45 Round Table: Discussion on Challenges and Opportunities for RSC Technology

Moderator: Eric Bescher, (UCLA)

8:00-12:00 WORKSHOP 2: ADVANCEMENTS IN OPTIMIZED

FORTA® CONCRETE PAVEMENT DESIGN

OptiPave Sponsored by FORTA SOUTHERN PACIFIC

8:00 Welcome and Overview

Moderator: Sherry Sullivan (FORTA)

8:15 AM The Evolution of Concrete Pavement Design

Eric Ferrebee (ACPA)

8:45 Pavement Designer, Web-based Pavement Design Software

Eric Ferrebee (ACPA)



9:00 Calibrating Pavement ME for High-Reliability Design Using Management Data

Lev Khazanovich (University of Pittsburgh)

9:30 PittRIGID, Web-based ME Design of Concrete Pavements Lev Khazanovich (University of Pittsburgh)

9:45 Break (30 min)

10:15 Overview of Short-Slab Concrete Pavements

Juan Pablo Covarrubias (TCPavements)

10:45 OptiPave, ME Design for Short-Slab Concrete Pavements Juan Pablo Covarrubias (TCPavements)

11:00 Accelerated Performance Testing of Short-Slab Concrete Pavement Systems

<u>Jeff Roesler</u> (University of Illinois)

11:30 Panel Discussion - Future of Concrete Pavement Design All Speakers

8:00-12:00



WORKSHOP 3: SUSTAINABILITY AND

PERFORMANCE CAN COEXIST: LOW EMBODIED CARBON CONCRETE PAVEMENTS LEADING THE WAY

Sponsored by Federal Highway Administration 7FPHYR

What does it take to design and place concrete paving mixtures that will help agencies meet their goals for carbon footprint reduction? What are the shared performance benefits? Techniques and strategies are mature and can be picked up now. The fundamentals of the new *Guide for Reducing Cradle-to-Gate Embodied Carbon Emissions Paving Concrete* will be illustrated for practitioners seeking to build their workforce and collaborate with contractors. This workshop will bring industry and agency partners who have begun to practice these principles to share their approaches taken and experience gained. Future directions will be explored for continued development.

8:00 Overview of *Guide for Reducing Cradle-to-Gate Embodied*Carbon Emissions Paving Concrete and applications to concrete specification and mixture design development

9:45 Break (15 min)

10:00 A Partnership Approach: A panel discussion from practitioners
11:00 Working Session
12:00 Adjourn

Facilitators (FHWA)

Nelson Gibson, Mike Praul, Robert Spragg, and Michelle Cooper



8:00-12:00



WORKSHOP 4: IMPACT OF NRRA ON ADVANCING CONCRETE PAVEMENT TECHNOLOGY

Sponsored by National Road Research Alliance HIAWATHA

8:00 Development of NRRA

Ben Worel (MnDOT)

8:15 History of NRRA Rigid Team Research Projects

Tom Burnham (MnDOT)

8:45 MnROAD facility operations and role in NRRA projects

Ben Worel (MnDOT)

9:00 Highlights from Low Cementitious Content Concrete Pavement Research Projects

Bernard Izevbekhai (MnDOT)

9:30 Fiber-Reinforced Concrete Pavement Research

Manik Barman (University of Minnesota Duluth - UMD)

10:15 Break (30 min)

10:45 Findings from 2022 MnROAD Alternative Cement Cells

Prashant Ram (Applied Pavement Technology - APTech)

11:10 Highlights from Early Opening of Concrete Pavement to Traffic Research Project

Maria Masten (MnDOT)

11:30 Panel Discussion of Industry Implementation Plans for Low Carbon Concrete

Moderator: <u>Glenn Engstrom</u> (Aggregate and Ready Mix Association of Minnesota)

8:00-12:00

WORKSHOP 5: ROLLER-COMPACTED CONCRETE PAVEMENTS

Pavement

Sponsored by RCC Pavement Council

ROCK ISLAND

8:00 AM Welcome and Overview

Corey Zollinger (CEMEX)

8:10 AM Overview of RCC Growth in USA / World

Corey Zollinger (CEMEX)

8:25AM Researcher Panel Discussion: Overview of RCC research supported by RCC Pavement Council

8:25 AM Managing Volumetric change of RCC

Dan Zollinger (Texas A&M University)

8:45 AM Container Pavement Design

Halil Ceylan (Iowa State University)

9:05 AM RCC Research Conducted at University of Illinois

Jeff Roesler (University of Illinois)



9:25 AM Researchers Panel Discussion

Moderator: <u>Fares Abdo</u> **9:45 AM Break (30 min)**

10:15 AM Publicly funded / DOT Applications of RCC

<u>Chris Carwie</u> (AG Peltz)

10:35 AM Local road applications of RCC

Matt Munsick (Andale)

10:55 AM Overcoming QA/QC challenges at RCC paving projects

Fares Abdo (Morgan Corp)

11:25 AM Industry Panel Discussion

Moderator: Corey Zollinger (CEMEX)

11:45 AM Wrap Up and General Discussion

9:45-10:15 BREAK DEPOT PAVILION

10:00-17:00 SPOUSE/GUEST HOSPITALITY ROOM

EMPIRE BUILDER

12:00-13:00 LUNCH DEPOT PAVILION

13:00-17:00 WORKSHOP 6: AIRPORT PAVEMENT - ACPTP

RESEARCH PROGRAM

Sponsored by Airport Concrete Pavement

Technology Program GREAT NORTHERN

13:00 Introduction

ACPTP

Moderator: Peter Taylor (CP Tech Center)

13:10 Mitigating Potential Alkali-Silica Reaction Expansion in Airfield Concrete Pavements

Jason Ideker (Oregon State University)

13:30 Performance Engineered Mixtures for Airfield Pavements

Tyler Ley (Oklahoma State University)

13:50 Best Practices for Rapid Repair, Rehabilitation, and

Reconstruction of Concrete Airport Pavements

Scott Murrell (Applied Research Associates)

14:10 Quality Control and Quality Acceptance of Airport Pavement

Tara Cavalline (University of North Carolina – Charlotte)

14:30 Break (30 min)

15:00 Best Practices for Runway Rubber Removal

Aaron Pullen (Applied Research Associates)

15:20 Effects of Diamond Grinding on Airfield Pavements

Jeff Stempihar (Nichols Consulting Engineering)

15:40 Design and Performance of Thin Concrete Airfield
Pavement

Scott Murrell (Applied Research Associates)



16:00 Concrete Airfield Paving Continuity - Best Practices Guide

Matt Fonte (Fonte & Company)

16:20 Future of the ACPTP Program

FAA Representative

16:30 Discussion

All Speakers

13:00-17:00 WORKSHOP 7: FIBER-REINFORCED CONCRETE



MATERIALS FOR PAVEMENTS

Sponsored by Fiber Reinforced Concrete

Association SOUTHERN PACIFIC

13:00 Welcome / Introduction to FRCA

13:15 Concrete Fiber Overview

14:00 Fiber Test Methods & Performance-Based Specifications

14:30 Break (30 min)

15:00 Case Studies & Other DOT Applications of FRC (Session 1)

15:30 Case Studies & Other DOT Applications of FRC (Session 2)

16:00 Troubleshooting FRC

16:30 Open Panel Discussion with Speakers

16:50 Wrap and Adjourn

13:00-17:00 WORKSHOP 8: CONCRETE PAVEMENT



PRESERVATION - SUSTAINABLE SOLUTIONS

FOR TOMORROW, TODAY

Sponsored by American Concrete Pavement
Association and International Grooving and
Grinding Association ZEPHYR

Welcome and Introductions

Moderator: <u>John Roberts</u> (IGGA) **Overview of Pavement Evaluation**

Kurt Smith (APTech)

Experience with Knowledge book and Lessons Learned

Gordon Bruhn (MnDOT)

Pavement Preservation Toolkit

John Roberts (IGGA)

Concrete Surface Characteristics

John Roberts (IGGA)

BREAK (30 min)

Sustainability Impacts of Proper Pavement Preservation

Nick Davis (IGGA)

Concrete Overlays and Overlay Preservation

<u>Jerry Voigt</u> (Square One Consulting)

Utilizing Concrete Strategies to Improve Competition

Jim Mack (CEMEX)



13:00-17:00 WORKSHOP 9: PAVEMENT FOUNDATIONS:



MEASUREMENTS



Sponsored by Federal Highway Administration and the National Concrete Pavement Technology Center HIAWATHA

REVIEW OF FOUNDATION REQUIREMENTS AND

13:00 Welcome/Introduction

Moderator: Leif Wathne (CPTech Center)

13:10 Why is this Important?

Tom Cackler (Ingios Geotechnics)

13:45 Foundation Design 101

<u>Jeff Roesler</u> (University of Illinois)

14:25 The Ideal Pavement

Tom Yu (FHWA)

15:05 Break (20 min)

15:25 How to Achieve Engineering Foundations

David White (Ingios Geotechnics)

16:45 Advancing National Practice

Tom Yu (FHWA)

13:00-17:00 WORKSHOP 10: MINE/READY-MIX PLANT TOUR

NSSGA NATIONAL STONE, SAND Sponsored by National Stone, Sand and Gravel
Association BACK ENTRANCE

13:00 Board bus for departure from THE DEPOT

13:15 Depart from conference hotel (safety briefing on bus)

14:00 Arrive at Holcim Empire Plant (16251 Biscayne Ave.,

Farmington)

14:00 Welcome and Overview (PPE provided for those without)

14:10 Guided tour of aggregate production facility

15:10 Guided tour of ready mixed concrete plant

16:00 Board bus for departure to conference hotel

16:45 Arrive at THE DEPOT and adjourn

18:00-21:00 BBQ RECEPTION at AET



ST. PAUL, MN Sponsored by American Engineering Testing Buses depart DEPOT at 17:30 and return by 21:00

WEDNESDAY, AUGUST 28

7:00-8:00 BREAKFAST DEPOT PAVILION

7:00-16:00 SPEAKER READY ROOM ALEX. MITCHELL



8:00-9:45 SESSION 9: TESTING AND

INSTRUMENTATION 3 GREAT NORTHERN

Mechanical Behavior of Plastic Roller-Compacted Concrete

Syed Faizan Husain

Feasibility of Pavement Temperature as a Surrogate for Performance of Rigid Pavements

Joseph Podolsky

Resistivity's Sensitivity to Concrete Mixture Design Parameters
Robert Spragg

Settime Time Monitoring of RCC Through an Air-Coupled Ultrasound Technique

Jesús Castro Pérez

8:00-9:45 SESSION 10: PERFORMANCE MODELING 2 HIAWATHA

Developing a Theoretical Model for Load Transfer of Common Joints in Rigid Airport Pavement Structures

Sean Jamieson

Effect of the Concrete Strength on Water-Coupled Cracks of Concrete Pavement

Huu Quoc Hung Nguyen

Deep Learning-Based Entrapped Air Segmentation And Evaluation (EASE) for Plain Concrete Pavement Applications Xiangdong Yan

A Deep-Learning Model to Estimate Rigid Pavement Stresses for Top-Down Cracking Airfield Pavement Design

Ali Ashtiani

8:00-9:45 POSTER SESSION1 (NCC) CONSERVATORY

9:45-10:15 BREAK DEPOT PAVILION

10:00-17:00 SPOUSE/GUEST HOSPITALITY ROOM

EMPIRE BUILDER

10:15-12:00 SESSION 11: PERFORMANCE MODELING 2

GREAT NORTHERN

Secrets of the Plate Load Test (1941-1955)

Anastasios M. Ioannides

Structural Evaluation of Double-Layer Precast Concrete Pavement by Wheel Loading Test and Analysis by 3DFEM

Takahiro Yokoyama

Mechanistic Back-calculation of the LTE of Jointed Pavements at the Corridor Level from TSD Deflection Velocity Measurements: Collected Case Studies

Martin Scavone



Developing a Next-Generation Concrete Pavement Analysis Tool Kathryn A Kennebeck

10:15-12:00 SESSION 12: CONSTRUCTION 1

HIAWATHA

Enhancing Concrete Pavement Work Zone Safety Through Passive Material Sensing

<u>Jeffery Roesler</u>

Optimizing Concrete Highway Paving: An Australian PerspectiveJames Walker

Concrete Pavements in Roundabout Intersections: Case StudiesKurt Smith, Shabbir Hossain, and Andy Naranio

Performance of Concrete Pavements with Optimized Geometry Panels Tendered By the Ministry of Public Works in Chile Juan Pablo Covarrubias

10:15-12:00 POSTER SESSION 2 (NCC) CONSERVATORY

12:00-13:00 LUNCH DEPOT PAVILION

13:00-14:45 SESSION 13: RECYCLED MATERIALS

GREAT NORTHERN

Evaluation of the Beneficial Use of Recycled Concrete Aggregates at the MnROAD Test Cells

Bernard Izevbekhai

The RAP Addition to Produce Concrete Pavements

Christian Paglia

Effects of RCA Replacement Level on Concrete Mechanical Properties

Rita Lederle

Case Studies of Problems and Solutions of Construction and Maintenance of Concrete Pavements in India

R.K. Jain and Satbir Singh Puwar

13:00-14:45 SESSION 14: CONSTRCUTION 2

HIAWATHA

Roller-Compacted Concrete Pavement Field Study: Connecting Mixture Volumetrics with Constructability

Jordan Ouellet

Recent Advances in RCC Roadway Construction in the USA Corev Zollinger

Innovative Test Setup for Transforming Singular Joint Deformations into Plural Cracks in Concrete Pavements Maximilian Weiß

Leveraging State-of-the-Art Large Language Models for Accident Analysis in the Highway Construction Industry

Mason Smetana



13:00-14:45 POSTER SESSION 3

CONSERVATORY

Wide-Base Tire Load's Impact on Transverse Cracking of Jointed Plain Concrete Pavement in Michigan

Jake Hiller

Twenty-Years Experience of Porous Concrete Pavements on Roadways in Japan

Nakamura Hironori

Research on Rheological Properties to Improve the Quality of Concrete Mixtures for Pavement

Kyong-Ku Yun

Utilization of the Pavement Condition Index for Roller Compacted Concrete Pavements: A Case Study in Türkiye İsmail Özgür Yaman

Development of a Framework for Assessing Global Warming Potential Across the Concrete Pavement Life Cycle

Michelle Cooper

The Maturity Concept for Early Opening of Concrete Pavements

- The Underutilized Opportunity

Jim Grove

Relative Significance of Coefficients and Local Calibration of PMED Rigid Performance Prediction Models

<u>Faizan A. Lali</u>

Differential Settlement Behavior and Verification of Precast Concrete Pavement and Base Layer

Mingjing Fang

Enhancing Mechanism of the Chemically Etched Fly Ash Cenosphere on Concrete PerformanceYating Zhang

13:00-14:45 BREAK

DEPOT PAVILION

15:15-17:00 SESSION 15: MATERIALS GREAT NORTHERN Compactability of Fiber-Reinforced Roller-Compacted Concrete Jesús Castro Pérez

Concrete Thermal And Optical Property Sensitivities to Mixture Proportions

Jefferv Roesler

Evaluation of the Suitability for Use of Ternary Cements with Carbonate Fillers Or Calcined Clays: Concrete Compositions Subjected to De-Icing Salts

Elia Boonen

Engineered Cementitious Composites (ECC) for Asphalt Rehabilitation – Feasibility Stage with Nonlinear Finite Element Modeling

TBD



15:15-17:00 SESSION 16: DURABILITY HIAWATHA

Improving Resistance to Damage from Freeze-Thaw of High-Early-Strength Concrete Mixtures Through the Application of AASHTO R 101 Concepts

Michelle Cooper

Analytical Study on Durability of Continuous Reinforced Concrete Pavement Mixing Various Admixtures

He Zongyao

Concrete Formation Factor: Experimental and Modeling MethodsJussara Tanesi

Performance Engineered Mixtures (PEM) Approach for Improved Concrete Durability And Sustainability - Case Studies

Jagan Gudimettla

15:15-17:00 POSTER SESSION 4 CONSERVATORY

Maturity-Strength Trends Observed from Carbon Dioxide Test Sections at MnROAD

Emil G. Bautista

Concrete Pavement Analysis in DOD's JEDI-2D Framework

Anastasios M. Ioannides

Optimizing Vibration Parameters of Thick Single-Layer Concrete Pavements: Results of the Belgian Monocrete Project

Audrey Van der Wielen

Future Climatic Temperature Change Effects and Environmental Considerations for South African Concrete Pavements

Refiloe Mokoena

The Effectiveness and Efficiency of Implementing Fast Set Concrete in Reparation and Reinstatement of Concrete Pavements

Teoh Sze Tean

Crack Survey on a Field Test of Continuously-Reinforced-Concrete Pavement (CRCP) Using Prefabricated Steel-Bar Mesh-Panels

Isamu Yoshitake

Performance-Based Testing of New Cements for Concrete Pavements

Bohuslav Slánský

18:00-21:30 AWARDS DINNER - STILLWATER RIVER BOATS
STILLWATER, MN



Buses depart DEPOT @ 17:30 and return @ 21:30 Sponsored by the American Concrete Pavement Association



THURSDAY, AUGUST 29

8:00-12:00 MINNEAPOLIS MUNICIPAL PAVEMENT

Minneapolis
City of Lakes
WALKING TOUR
FRONT ENTRANCE
Tour will leave at 8:00 and return by 11:00

Option to take city bus back to DEPOT
Hosted by the City of Minneapolis

8:00-12:00 MNROAD TOUR BACK ENTRANCE

Buses leave at 8:00 and return by 12:00
Transportation sponsored by Power Pavers

Tour hosted by the National Road Research

Alliance and the Minnesota DOT

MEALS

ASH GROVE

∕InRO∕∕D

Breakfasts (8:00-9:00) on Monday, Tuesday, and Wednesday sponsored by Diamond Surface

Lunches (12:00-13:00) on Monday, Tuesday, and Wednesday sponsored by Ash Grove Cement

CONFERENCE STEERING COMMITTEE

Tom Burnham Conference Chair and ISCP VP

Manik Barman Technical Program Co-Director/Editor
Anna-Carin Brink Technical Program Co-Director/Editor

Jake Hiller ISCP President

Eric Ferrebee Sponsorship Co-Coordinator
Leif Wathne Sponsorship Co-Coordinator
Peter Taylor Workshop Co-Coordinator
Sherry Sullivan Workshop Co-Coordinator
Corey Zollinger Finance Co-Coordinator
Armen Amirkhanian Finance Co-Coordinator

<u>Tara Cavalline</u> Student Competition Coordinator

Mike Wallace Local Events Coordinator

<u>Sushobhan Sen</u>
<u>Hugo Gonzalez</u>
Yating Zhang

Intl Participation Co-Coordinator
Intl Participation Co-Coordinator

