

13th International Symposium on Concrete Roads

PROGRAMME

Patronage:

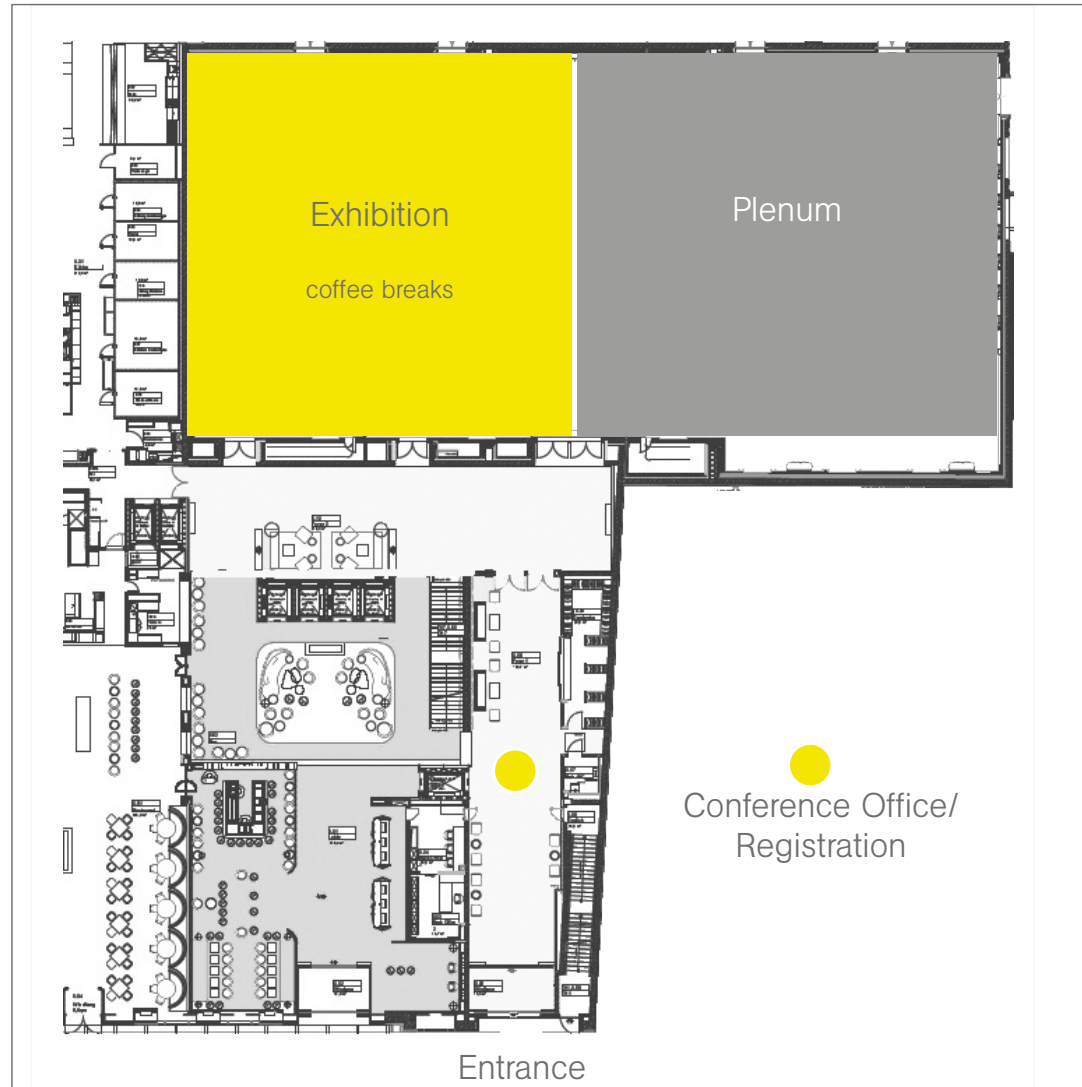


Federal Ministry
of Transport and
Digital Infrastructure

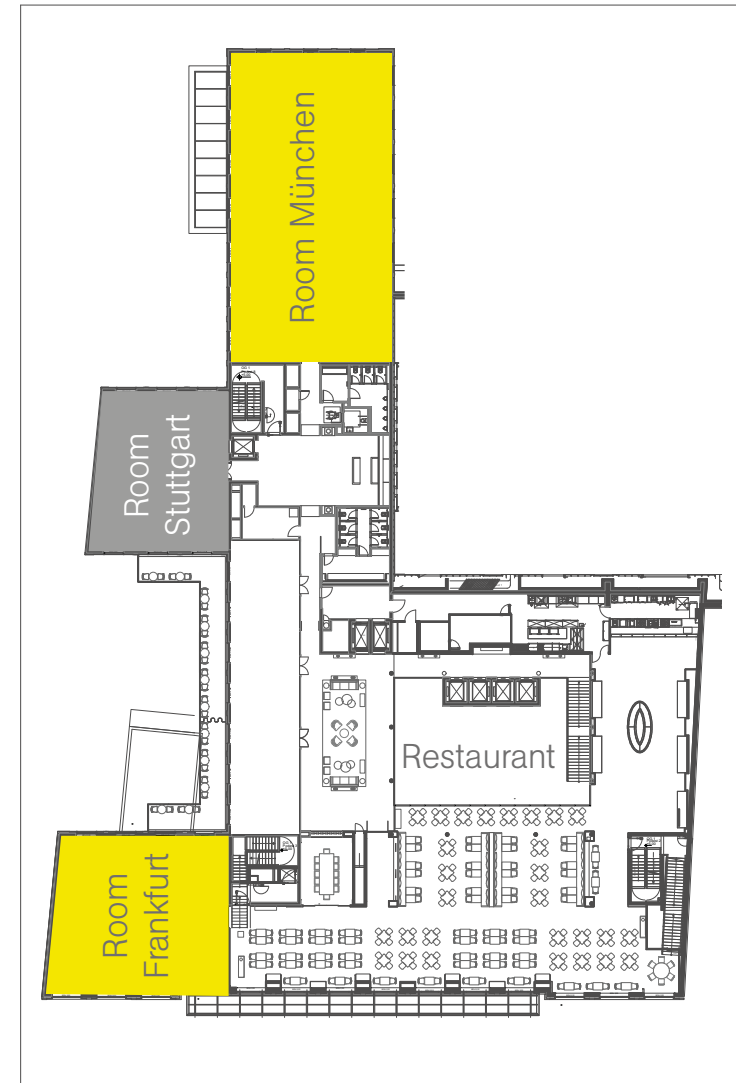
**19 - 22 JUNE 2018
BERLIN**

Hotel Titanic Chaussee | Chausseestraße 30 | 10115 Berlin | Germany

GROUND FLOOR



FIRST FLOOR



Tuesday, 19 June, 2018

- 14:00 - 18:00 Registration
- 18:00 **WELCOME RECEPTION** IN THE FOYER (GROUND FLOOR), TITANIC CHAUSSEE BERLIN
- Welcome word by
- Ulrich Nolting, Managing Director, InformationsZentrum Beton GmbH (IZB)
 - Luc Rens, Managing Director, European Concrete Paving Association (EUPAVE)
 - Jeffery Roesler, President, International Society for Concrete Pavements (ISCP)



Wednesday, 20 June, 2018

- 07:30 - 18:00 Registration
- 09:00 - 10:30 **OPENING SESSION**
- Opening speech by
- Dipl.-Wirt.-Ing. Ulrich Nolting, InformationsZentrum Beton GmbH
 - Gerhard Rühmkorf, Head of Section, Federal Ministry of Transport and Digital Infrastructure
 - Stéphane Nicoud, President of EUPAVE
 - Claude Van Rooten, President of the World Road Association (PIARC)
 - Dir.'in Dipl.-Ing. Elfriede Sauerwein-Braksiek, Chair of the Road Transportation Research Association (FGSV)
- Keynote speech by
- Michael Darter
- 10:30 - 11:00 Coffee break
- IN THE FOYER (GROUND FLOOR)

Wednesday, 20 June, 2018

11:00 - 12:30



PLENUM

SESSION 1

Chairman Dipl.-Ing. Thomas Wolf

Overview Lecture and Keynote Speech

Welcome Address

Dipl.-Ing. Thomas Wolf STRABAG Großprojekte GmbH,
Head of the FGSV working group 'Concrete pavements',
Munich

Presentation of the Otto Graf Foundation's Concrete Infrastructure Young Talents Award

Dir.'in Dipl.-Ing. Elfriede Sauerwein-Braksiek
Chair of the FGSV

Concrete Pavement Construction Outside Germany: Report from the 2015 Award Winner

Dipl.-Ing. Martin Langer
STRABAG Großprojekte GmbH, Munich

Research and Development in the Field of Concrete Pavement Construction 2015–2018

Dipl.-Ing. Thomas Wolf
Head of the FGSV working group 'Concrete pavements'

Keynote Speech: Concrete Roads in Germany - Markets and Possibilities

Ulrich Nolting
InformationsZentrum Beton GmbH, Ostfildern

ROOM FRANKFURT

SESSION 2

Chairwoman Anne Beeldens

Theme 6: Maintenance Strategies, Assessment of Structural Capacity of Concrete Pavements

Decision Support Tool for Road Restraint Systems

SPEAKER Zoran Kenjic
AUTHORS W. Nijssen, Z. Kenjic
COUNTRY Netherlands

Development of a Test Procedure to Determine the Coefficient of Thermal Expansion of Concrete – Investigation on German Concrete Pavement

SPEAKER Alexandra Spilker
AUTHOR A. Spilker
COUNTRY Germany

Standardisation of Concrete Pavements in the Netherlands

SPEAKER Wim Kramer
AUTHORS W. Kramer, G. Jurriaans
COUNTRY Netherlands

Optimum Repair and Rehabilitation Methodologies of CRCP in Texas

SPEAKER Moon Won
AUTHORS M. Won, PG. Choi, SW. Ryu,
JH. Nam, SI. Jeon
COUNTRY USA

ROOM MÜNCHEN

SESSION 3

Chairman Ozgur Yaman

Theme 4: Materials – Concrete for Various Applications

Why Not Concrete – A Quarter of Century Lasting Experience in Promotion of Concrete Pavements in Poland

SPEAKER Jan Deja
AUTHORS J. Deja, P. Kijowski
COUNTRY Poland

Analysis of the Infiltration Rate Variation Along Time of Pervious Concrete Pavements in Tropical Climate

SPEAKER Rafael Batezini
AUTHORS F. Curvo, R. Batezini, J. T. Balbo
COUNTRY Brasil

New Developments for Technical and Economic Optimization of Porous Concrete

SPEAKER Paul Vogel
AUTHORS J. Orben, R. Kem, P. Vogel, V. Bik
COUNTRY Germany

Limits for Freeze-Thaw Resistance in the Presence of De-Icing Salts of Road Concrete: First Results of the GELAVIA Project

SPEAKER Sylvie Smets
AUTHORS S. Smets, E. Boonen, C. Pierre,
G. Vanhamme
COUNTRY Belgium

Use of Waste to Energy Bottom Ash from MSW as Recycled Aggregate in a Roller Compacted Concrete in Mallorca (Spain)

SPEAKER José Maria Merino Thomas
AUTHOR F. Martinez Cuat
COUNTRY Spain

Wednesday, 20 June, 2018

12:30 - 13:30 Lunch break IN THE FOYER (GROUND FLOOR) AND RESTAURANT (FIRST FLOOR)

13:30 - 15:00  **FGSV-Betonstraßentagung**

PLENUM

SESSION 4

Chairman Dr. Ulf Zander

Theme 7: Surface Characteristics and Modern Methods of Execution

Reliable Concrete Pavement Production Processes

Dr.-Ing. Marko Wieland
Federal Highway Research Institute (BASt), Bergisch Gladbach

Grinding, the New Technique for Low-Noise and Even Concrete Surfaces

Dipl.-Ing. Tim Alte-Teigeler
Otto Alte-Teigeler GmbH, Bietigheim

Skid Resistance of Concrete Roads

Dipl.-Ing. Jens Skarabis
Silentex GmbH, Berlin

Test Procedures for Relevant Characterization of Joint Sealants

Univ.-Prof. Dr.-Ing. Rolf Breitenbücher,
Ruhr University Bochum, Bochum

The New Guideline “M VaB Part 3: Container- and Logistic Pavements”

Univ.-Prof. Dr.-Ing. Stephan Freudenstein
Technical University of Munich, Munich

ROOM FRANKFURT

SESSION 5

Chairman Wim Kramer

Theme 8: General Reports on Application of Concrete Pavements

Modern Cement Concrete Pavements at Construction of Main Roads in Republic of Uzbekistan

SPEAKER Mirzakhid Miralimov
AUTHORS M. X. Miralimov, K. K. Karen
COUNTRY Uzbekistan

The Physics of Concrete

SPEAKER Anna-Carin Brink
AUTHOR A.-C. Brink
COUNTRY Australia

Active Crack Control in Continuously Reinforced Concrete Pavements (CRCP)

SPEAKER Pieter De Winne
AUTHORS P. De Winne, H. De Backer,
S. Depuydt
COUNTRY Belgium

Regionalized Life Cycle Assessment Tool for Designing Concrete Pavement Alternatives

SPEAKER Eric Ferrebee
AUTHORS E. Ferrebee, J. Roesler
COUNTRY USA

Overview of Pavement-Vehicle Interaction Related Research at the MIT Concrete Sustainability Hub

SPEAKER James Mack
AUTHORS J. Mack, M. Akbarian, F. J. Ulm,
A. Loughalam
COUNTRY USA

ROOM MÜNCHEN

SESSION 6

Chairman Halil Ceylan

Theme 1: High Axle – Load Areas

Construction of Highly Loaded Concrete Pavements in Industrial Areas

SPEAKER Stephan Freudenstein
AUTHORS S. Freudenstein, M. Bolln
COUNTRY Germany

Expansion Lelystad Airport

SPEAKER George Jurriaans
AUTHORS G. Jurriaans, J. van de Vleuten
COUNTRY Netherlands

How to Incorporate Function Criteria in the Design – A Case Study: the CER (Container Exchange Route) in Rotterdam

SPEAKER Anne Beeldens
AUTHORS A. Beeldens, J. de Vrieze
COUNTRY Belgium

Theme 11: Soil Treatment and Base Layers

Environmental and Economic Benefits of FDR with Cement in the Improvement of a 120,000m² Empty Containers Platform in Valencia Port (Spain). Comparison with Standard Flexible Solution

SPEAKER Rafael Rueda
AUTHORS C. Tarin, M. Canillas, C. Barat,
J. M. Merino, R. Rueda
COUNTRY Spain

Mix Design of Optimized Excavatable Cement Treated Materials Using a New Punching Test Apparatus

SPEAKER Eric Gennesseaux
AUTHORS E. Gennesseaux, T. Sedran,
J. M. Torrenti, M. Hardy
COUNTRY France

15:00 - 15:30 Coffee break IN THE FOYER (GROUND FLOOR)

Wednesday, 20 June, 2018

15:30 - 17:00



PLENUM

SESSION 7

Chairman Dr. Oliver Mielich

Theme 4: Materials – Concrete for Various Applications

Availability of Aggregates for Road Construction

Dr. Olaf Enger
Bundesverband Mineralische Rohstoffe e. V. (MIRO),
Cologne

Use of ASR Damaged Recycled Concrete Aggregates as sub-base Material in Road Construction

Dipl.-Ing. Janette Klee
Brandenburg State Agency for Roads, Hohen Neuen-
dorf

Alkali-Silica-Reaction in the Municipal Road Construction

Dr. Christoph Müller
Geschäftsführer VDZ gGmbH, Dusseldorf

Alkali-Silica-Reaction in Concrete Pavements Considering Traffic and De-icing Agents

M. Sc. Robin Przondziona
Ruhr University Bochum, Chair of building material
technics, Bochum

Multiscale Modelling of ASR Induced Deterioration in Concrete Pavements

Dipl.-Ing. Andreas Wiedmann
Karlsruhe Institute of Technology, Karlsruhe

ROOM FRANKFURT

SESSION 8

Chairman Martin Peck

Theme 3: Urban and Rural Roads, Intersections and Roundabouts

Concrete Pavements for Bus Stops – Swedish Experiences

SPEAKER Johan Silfwerbrand
AUTHOR J. Silfwerbrand
COUNTRY Sweden

Construction of a Thin Concrete Overlay for a Very Heavy Traffic Roundabouts

SPEAKER Sergio Carrascón
AUTHORS S. Carrascón, J. Verdú, F. Cortés, M.
Romero, A. Diego
COUNTRY Spain

Economic Feasibility Study of Bus Lane in Asphalt and Concrete Structure

SPEAKER Lena Pauli
AUTHORS L. Pauli, A. Grossman
COUNTRY Germany

Pavement Construction in Urban Areas

SPEAKER Martin Peyerl
AUTHORS M. Peyerl, G. Maier, S. Krispel
COUNTRY Austria

ROOM MÜNCHEN

SESSION 9

Chairman Gerald Voigt

Theme 9: Quality Control and Testing

Performance Engineered Mixtures (PEM) for Concrete Pavements

SPEAKER Ezgi Yurdakul
AUTHORS P. Taylor, X. Wang, E. Yurdakul
COUNTRY USA

Ultrasonic Tomography and Ground Penetrating Radar as Non-destructive Measuring Techniques for Concrete Pavement Evaluation

SPEAKER Audrey Van der Wielen
AUTHORS A. Van der Wielen, C. Grégoire,
M. Lybaert, E. Boonen
COUNTRY Belgium

Development of a Dowel Alignment and Location Guide Specification

SPEAKER Mark Snyder
AUTHORS M. Snyder, G. Voigt, R. Rodden
COUNTRY USA

Theme 10: Big Data – Concepts to Optimize the Use of Entire Infrastructure Networks

LCA and LCCA Assessment Tool for Pavements

SPEAKER Sergio Carrascón
AUTHORS S. Carrascón, C. Bartolomé, J. Díaz,
R. López, R. Rueda, I. Zabala
COUNTRY Spain

Life Cycle Cost Analysis Accounting for the Uncertainties in Pavement Performance and Rehabilitation Costs

SPEAKER James Mack
AUTHOR F. Mu, J. Mack
COUNTRY USA

Thursday, 21 June, 2018

09:00 - 10:30

10:00 - 11:15

PLENUM

POSTERS PRESENTATIONS BY AUTHORS

10:30 - 11:15

Coffee break IN THE FOYER (GROUND FLOOR)

12:00 - 18:00

TECHNICAL TOURS

Technical Excursion - Excursion to CEMEX Zement GmbH, Rüdersdorf cement works
 Technical Excursion - Construction of a Bus Stop with Precast Concrete Slabs in Berlin
 Technical Excursion - Technical Trip Grinding – Federal Motorway A10
 Technical Excursion - Construction of a Shiplift (Niederfinow Boat Lift)

ROOM FRANKFURT

SESSION 11

Chairman George Jurriaans

Theme 2: Highways and Truck Parking Areas

Construction Practices and Details in CRCP

SPEAKER Luc Rens
 AUTHOR L. Rens
 COUNTRY Belgium

Development of SPS-2 Pavement Preservation Experiment

SPEAKER Nicole Duffala
 AUTHORS N. Duffala, T. Punnackal,
 P. Schmalzer, J. Uhlmeyer
 COUNTRY USA

Measuring the Zero-Stress Temperature in Concrete Carriageways

SPEAKER Axel Riwe
 AUTHORS A. Riwe, S. Villaret, K. Villaret
 COUNTRY Germany

Use of MSW Slags in Cement Treated Layers in a Ring Road in Mallorca (Spain)

SPEAKER Aina Canaleta
 AUTHOR F. Martinez Cuat
 COUNTRY Spain

Development of Concrete Roads in Nigeria

SPEAKER Jean Pondy
 AUTHOR J. Pondy
 COUNTRY Cameroon

ROOM MÜNCHEN

SESSION 12

Chairman Martin Peyerl

Theme 4: Materials – Concrete for Various Applications

Recycled Concrete Aggregates in Pavement Concrete: Research and Practice in Belgium

SPEAKER Elia Boonen
 AUTHORS E. Boonen, S. Smets,
 A. Van der Wielen, A. Beeldens
 COUNTRY Belgium

Investigating the Response of Ultra-thin Continuously Reinforced Concrete Pavements to Initial Loading

SPEAKER Phia Smit
 AUTHORS P. Smit, E. Kearsley
 COUNTRY South Africa

Internal Curing and Curling for Concrete Pavement Applications

SPEAKER Jeffery Roesler
 AUTHORS A. Amirkhanian, J. Roesler
 COUNTRY USA

New Approach to Prevent a Damaging Alkali-Silica Reaction (ASR) in Concrete for Road Pavements

SPEAKER Patrick Schäffel
 AUTHOR P. Schäffel
 COUNTRY Germany

Flexbeton: a New Approach to Pavement Materials

SPEAKER Penny Pipilikaki
 AUTHORS P. Pipilikaki, D. van Vilet,
 J. Kruithof, J. de Vrieze
 COUNTRY Netherlands

Friday, 22 June, 2018

9:00 - 10:30

PLENUM

SESSION 13

Chairman Jeffery Roesler

Theme 8: General Reports on Application of Concrete Pavements

A Review of Pavement Economic Studies at the MIT Concrete Sustainability Hub

SPEAKER James Mack
AUTHORS J. Mack, O. Swel, M. Akabarian, J. Gregory, R. Kirchain
COUNTRY USA

Cracking Pattern and Load-Transfer Efficiency Analysis of a Continuously Reinforced Concrete Pavement Under Tropical Environment

SPEAKER Andréia Cargnin
AUTHORS A. Cargnin, J. T. Balbo
COUNTRY Brasil

Recent Advances and Uses of Roller Compacted Concrete for Pavement Construction in the United States

SPEAKER Corey Zollinger
AUTHOR C. Zollinger
COUNTRY USA

Field Application of Two-Lift Concrete Pavement with Very High Performance Concrete

SPEAKER Kyong-Ku Yun
AUTHORS K. K. Yun, K. Namkung, S. Y. Han, K. R. Lee
COUNTRY USA

ROOM FRANKFURT

SESSION 14

Chairman Mark Snyder

Theme 6: Maintenance Strategies, Assessment of Structural Capacity of Concrete Pavements

Electrically Conductive Concrete Heated Pavement System Using Two-Lift Construction Technology

SPEAKER Halil Ceylan
AUTHORS H. Abdualla, H. Ceylan, S. Kim, A. Nahvi, K. S. Cetin, P. C. Taylor, M. Mina, K. Gopalakrishnan
COUNTRY USA

Assessment of Structural Capacity for Systematic Maintenance Planning

SPEAKER Stephan Villaret
AUTHORS M. Wieland, S. Villaret
COUNTRY Germany

A 3D Approach for Evaluating the Structural Condition of Jointed Plain Concrete Pavements in a Pavement Management Context

SPEAKER Marko Wieland
AUTHORS M. Wieland, M. Sesselmann
COUNTRY Germany

Innovative Road Coating: An Original Solution to Improve Safety and Durability of Concrete Pavement

SPEAKER Duc Tung Dao
AUTHORS D. T. Dao, E. Mohsen, F. De Larrard, M. L. Nhuyen, T. Sedran, P. Hornych
COUNTRY France

ROOM MÜNCHEN

SESSION 15

Chairman Rolf Breitenbücher

Theme 4: Materials – Concrete for Various Applications

Comparison of Laboratory Practices for Roller Compacted Concrete Pavements

SPEAKER Emin Sengun
AUTHORS E. Sengun, A. Aykutlu, B. Alam, O. Yaman
COUNTRY Turkey

Experience with Pervious Concrete Pavements in Germany

SPEAKER Robert Bachmann
AUTHOR R. Bachmann
COUNTRY Germany

Fatigue Behavior of Concrete Including Recycled Concrete Aggregate

SPEAKER Thierry Sedran
AUTHORS T. Sedran, E. Genesseeux
COUNTRY France

Erosion-Based Design for PCC Pavements

SPEAKER Dan Zollinger
AUTHORS K. Cunagin, D. Zollinger, B. Birgisson
COUNTRY USA

Low Carbon Footprint Pavement: History of Use, Performance and New Opportunities for Belitic Calcium Sulfoaluminate

SPEAKER Eric Bescher
AUTHORS E. Bescher, J. Kim, C. Ramseyer, J.K. Vallens
COUNTRY USA

10:30 - 11:15

Coffee break

IN THE FOYER (GROUND FLOOR)

Friday, 22 June, 2018

11:15 - 12:45

PLENUM

SESSION 16

Chairman Bryan Perrie

Theme 8: General Reports on Application of Concrete Pavements

Concrete Pavement Joint Sealing & Filling – A U.S. Perspective

SPEAKER Gerald Voigt
AUTHORS G. Voigt, M. Snyder
COUNTRY USA

Creation and Development of Pavementdesigner.org – A Unified Industry-Wide Pavement Design Tool for Concrete and Cement-Based Solutions

SPEAKER Eric Ferrebee
AUTHORS E. Ferrebee, A. Gieraltowski, G. Voigt
COUNTRY USA

The Future of Concrete Pavement in North America

SPEAKER Leif Wathne
AUTHORS L. Wathne, G. Voigt
COUNTRY USA

DUT Workshop Report

SPEAKER Lambert Houben
COUNTRY Netherlands

ROOM FRANKFURT

SESSION 17

Chairwoman Anna-Carin Brink

Theme 2: Highways and Truck Parking Areas

Re-Engineering CRCP Design

SPEAKER Jeffery Roesler
AUTHORS S. Dahal, J. Roesler, S. Gillen, D. Gancarz
COUNTRY USA

Two Case Studies of Two Lift CRCP on Belgian Highways: The Open Tunnel on the E34 and the Ring Road of Couvin (E420)

SPEAKER Anne Beeldens
AUTHORS A. Beeldens, B. Vynckier, G. Lambert
COUNTRY Belgium

Theme 7: Surface Characteristics and Modern Methods of Execution

Next Generation Concrete Surface (NGCS). Finally a Silent and Sustainable Pavement?

SPEAKER Pieter De Winne
AUTHORS B. Vanhoorewe, L. Rens, A. Beeldens
COUNTRY Belgium

Noise Measurements on a New Generation Concrete Surface and an Optimized Exposed Aggregate in the Netherlands

SPEAKER Wim van Keulen
AUTHORS W. van Keulen, H. J. Vennix
COUNTRY Netherlands

ROOM MÜNCHEN

SESSION 18

Chairman Thierry Sedran

Theme 4: Materials – Concrete for Various Applications

Magnetizable Concrete for Wireless Electric Vehicle Charging

SPEAKER Mauricio Esguerra
AUTHORS M. Esguerra, R. Lucke, E. P. Nielsen, F. Brandt
COUNTRY Germany

Repair of Concrete Pavements in Thin-Layered New Concrete

SPEAKER Rolf Breitenbücher
AUTHORS R. Breitenbücher, C. Schulte-Schrepping
COUNTRY Germany

Large-Scale Renewals of Concrete Pavement without Disrupting Traffic

SPEAKER Dr. Martin Bäuml
AUTHORS Dr. M. Bäuml, J. Melchior
COUNTRY Switzerland

Theme 5: Precast Systems

Precast Concrete Slabs for Construction and Repairing High Quality in Short Time

SPEAKER Tim Alte-Teigeler
AUTHORS T. Alte-Teigeler, S. Villaret
COUNTRY Germany

Precast Concrete Pavement for Rapid Replacement of Intersections and Ramps

SPEAKER Shiraz Tayabji
AUTHORS S. Tyson, S. Tayabji
COUNTRY USA

13:00 - 14:00

PLENUM

CLOSING SESSION

Best Technical Paper Award by Luc Rens, Managing Director, EUPAVE
Best Marketing Paper Award by André Burger, Vice-President, EUPAVE
Conclusion by Ulrich Nolting, Managing Director, IZB
Closing of the Symposium



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