

8th DUT Workshop and 12th ISCR Feedback

Riaan Burger
SANRAL WR

Content

- Introduction
- Feedback on:
 - 8th DUT Workshop
 - 12th International Symposium on Concrete Roads

Introduction

- 8th DUT Workshop and 12th ISCR were held in Prague, Czech Republic
- DUT Workshop held on 20 and 21 September 2014
- ISCR held from 23 to 26 September 2014

8th DUT Workshop

- “8th International DUT-Workshop on Research and Innovations for Design of Sustainable and Durable Concrete Pavements”
- Organised 4-yearly to coincide with ISCR
- 30 participants from 9 countries, 24 papers
- Keynote speech by Prof. A.A.A. Molenaar
- Organised around four themes:
 - I. Materials
 - II. Advanced analysis, design and evaluation of concrete pavements
 - III. Continuously reinforced concrete pavements
 - IV. Innovations
- More than 50% of time devoted to discussions



8th DUT Workshop: Theme 1

Materials

- 2 papers presented
- Main focus was on fatigue of concrete

8th DUT Workshop: Theme 2

Advanced analysis, design and evaluation of concrete pavements

- 12 papers presented
- Main topics covered:
 - Concrete pavement temperature, thermal stresses
 - Stresses induced by (dynamic) traffic loads
 - Local calibration of pavement performance models
 - Joints
 - Field behaviour vs. modelling

8th DUT Workshop: Theme 3

Continuously reinforced concrete pavements

- 6 papers presented
- Main topics:
 - Sustainability related considerations for design, performance and construction
 - Effects of load speed on traffic induced stresses
 - Effects of asphalt interlayer on thermal stresses
 - Surface notches (crack inducers) to obtain more regular crack pattern

8th DUT Workshop: Theme 4

Innovations

- 4 papers presented
- Main topics:
 - Porous concrete pavement
 - (Ultra Thin) concrete overlay on asphalt pavement
 - Innovative and durable maintenance and repair on airports
- Paper by Bredenhann, Burger and van Zyl presented during this session
 - Focussed on performance of UTCRCP on truck crawler lane between Huguenot tunnel and toll plaza (N1/1)



8th DUT Workshop: Keynote speech

- Delivered by Prof A.A.A. Molenaar
- “Is there a future for concrete pavements?”
- Yes, but concrete road industry will have to work smarter in order to leverage advantages
 - E.g. Precast pavements
 - Improve models used in LCCA to show advantages of concrete (perpetual pavements)
 - Further development of use of recycled concrete in pavements

12th ISCR

- Theme of the symposium: “Innovative Solutions – Benefiting Society”
- 4-yearly symposium organised by EUPAVE (European Concrete Paving Association)
- Organised around 4 main themes:
 - I. Sustainable Pavements
 - II. Solutions for Urban Areas
 - III. Design and Construction
 - IV. Maintenance and Rehabilitation
- Keynote speech delivered by Gerald Voigt (ACPA – president & CEO)
- More than 100 presentations & posters

12th ISCR: Keynote speech

- Delivered by Gerald Voigt – president & CEO of ACPA
- “Perspectives on the Future of Concrete Pavement... Using Lessons from the Past”
- Gave a perspective on concrete road industry in USA and how lessons learnt over 5 decades can direct the future of concrete pavements

12th ISCR: Theme 1

- Sustainable Pavements – 23 papers, 6 posters
- Main topics:
 - Surface characteristics
 - Environmental assessment
 - Energy efficiency
 - Recycling
 - Social aspects
 - PPP projects



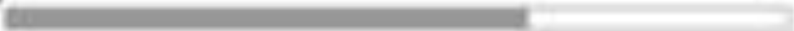
Asphalt pavement

HPM: 100.0 MPa
Time: 400.0



Concrete pavement

HPM: 52.5 MPa
Time: 400.0



12th ISCR: Theme 2

- Solutions for Urban Areas – 15 papers, 3 posters
- Main topics:
 - Concrete roundabouts
 - Dedicated Public Transport Lanes
 - Bus Stops
 - High Quality Surface
 - Roller Compacted Concrete
 - Electrified Pavements
 - Heated Transportation Infrastructures



12th ISCR: Theme 3

- Design and Construction – 35 papers, 12 posters
- Main topics:
 - Mix design
 - Structural design: joints – CRCP
 - Behaviour in situ: composite roads – CRCP
 - Testing and quality control
 - Special applications



**Behind the Paver
& Hand Finishing**

**In Front of
the Spreader**

**In Front of
the Paver**

12th ISCR: Theme 4

- Maintenance and Rehabilitation: 15 papers, 6 posters
- Main topics:
 - Rehabilitation methods
 - Rapid repair methods
 - Concrete recycling
 - In situ recycling
 - Surface restoration
 - Monitoring, diagnostics and test methods
 - New developments in maintenance and rehabilitation

12th ISCR: Field Trips



Choose one from three trips
torway
rs
ne A Exter



12th ISCR: Summary



Program with high quality papers, enough
and good social program
organised and it is worthwhile to



