

Feedback:17th AAPA International Flexible Pavements Conference

13/08/2017 - 17/08/2017

Melbourne Convention and Exhibition Centre
Roads of the Future, Embracing Disruption

RPF - 14 November 2017

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Introduction

- **13th – 16th August | Melbourne Convention & Exhibition Centre**
- **The theme: Roads of the Future – Embracing Disruption**
 - Future **change** offers opportunities, challenges and excitement
 - The future of transport and the role that roads play in moving people and goods is facing unprecedented potential disruption.
 - At the same time, the Roads of the Future are the key to creating the economic opportunities of tomorrow.
 - The aim is to help prepare for future challenges, by openly discussing the possible disruption that will come through new digital and physical environments and technologies.
 - The main objective is to provide a platform for the Flexible Pavement Industry and its stakeholders, suppliers and partners to share, consider and plan for the impacts and changes and ensure the continued growth and success of our sector.

Introduction

The program included sessions on:

- **Constructing the Roads of the Future**
- **Perpetual and Heavy Duty Pavement Technology**
- **Next Generation Bituminous Surfacing**
- **Flexible Pavement Technology for (Air) Ports**
- **Resilient Regional and Local Government Roads**
- **Managing Road Networks in a Digitally Connected World**
- **Delivering the Smart, Safe and Sustainable Roads of the Future**

Introduction

2 Workshops:

WORKSHOP - TOWARDS SAFER SPRAYED SEALING OPERATIONS - FORWARD-MOVING AGGREGATE SPREADING

- included presentations and panel discussion by senior AAPA and VicRoads representatives on the introduction of safer sprayed sealing operations in Victoria through the use of non-reversing aggregate spreaders. From July 2022 aggregate spreading on sprayed seals in Victoria will be required to be non-reversing.
- Session provided an insight into the change process, financial incentives, equipment availability and the implications for the sprayed sealing sector, both in Victoria and across Australia.

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2 Workshops:

WORKSHOP - NATIONAL SPRAYED SEAL WORKHOP

- **It has been ten years since the first national workshop was held to inform the research agenda for sprayed seals. The workshop aim was to identify gaps in current knowledge and practice of spray seal technology. The outcome of the workshop will be a set of issues and ideas, which will be presented to Austroads to inform the future research program.**
- **Well Attended and RSA delegates (Gerrie van Zyl) had huge impact sharing knowledge and experience**

Overview of papers submitted

- **80 submitted papers - was the biggest in AAPA conference history**
- **The exhibition showcased over 40 organisations, 321 tonnes of equipment.**
- **South African delegation at AAPA 2017:**
 - **Gerrie van Zyl**
 - **Herman Marais.**
 - **Johan Muller**
 - **Wynand Nortje**
 - **Wim Hofsink**
 - **Saied Solomons**
 - **Bennie Greyling**
 - **Shan Hansraj**

Overview of papers submitted - Keynote

- Keynote speakers and Topics
- Embracing disruption - [Bernard Salt](#), KPMG demographics:
 - What will transport look like in tomorrow's world?
 - How will the effects of climate change and environmental sustainability change our industry?
 - Will autonomous vehicles revolutionise our cities?
 - Will government be able to adequately fund the infrastructure revolution?
 - How will an aging population affect our lives?

Overview of papers submitted - Keynote

- **Global trends bitumen production and supply – Jonathan Pegler – Puma**
 - He outlined changes in the bitumen supply chain over the past 20 years and the drivers for the global reduction in the number of refineries. What are the new realities for the industry and how do bitumen suppliers assure the continued quality of bitumen?
- **Future change, disruption and opportunities in the flexible pavements industry - Audrey Copeland**
 - Focus on key items that NAPA members, Audrey have observed and learned that may impact our industry through challenges, possible disruptions, and opportunities for the asphalt pavement industry.

Overview of papers submitted - Keynote

- Constructing the roads of the future - **André Dorée** *University of Twente, Netherlands*
 - This included presentations on the use of smart technology for process control to improve consistency, quality and efficiency of pavement construction.
 - Smart equipment, including autonomous, construction and safety vehicles,
- Special session: tyre-derived crumb rubber in asphalt and sprayed seal
 - world renowned crumb rubber expert, **Dr David Jones**
 - Successful use and performance of crumb rubber modified asphalt in California and across the USA
- **Audrey Copeland** (NAPA) and **Egbert Beuving** (EAPA) presented the lessons learned with green procurement and environmental product declarations for asphalt in the US and Europe.

T12 | Constructing the roads of the future

SESSION OPENER

The role of systems engineering and building information

T13 | Asphalt the 100% reusable construction product

SESSION OPENER

Recycling behaviour of rejuvenating agent on aged

aged asphalt
Vang
Route of Highway
Transport, China

T14 | Delivering smart safe and sustainable roads of the future

SESSION OPENER

Machine Pedestrian Interface the Safer Way Forward

Glenn McLeod
JCB Construction
Equipment

W1 | 2nd AAPA/Austrroads National Sprayed Seal Workshop: 10am - 2pm

Continued...

Locally on Flat screen panels

of rejuvenators
for long-term
performance
Giustozzi
Burne Institute
Technology (RMIT)

Naphthenic Oil for bitumen rejuvenation
Anna Eriksson
Nynas

ement of high
asphalt mixes
statistical tools
Petho
Hogan

Latest developments in crumb rubber modified bitumen for use in asphalt and seals - the South African experience
Herman Marais
Much Asphalt, South Africa

ery from RAP
allow for binder
erisation

Cutter Properties And The Impact On Cutback Bitumen Over Time
Ryan Jansz
Boral



SAMI Bitumen

Rod McArthur
Topcoat Asphalt

AAPA informal technical Worksop Brisbane.

"Smart Construction for more Durable Roads"

18 August 2017

- **Crumb Rubber Modified Asphalt - Dave Jones**
- **Thin asphalt surfacing - Herman Marais**
- **Smart construction monitorising - André Dorée**
- **BIM in practice - Linking mix and structural design - Peter Bryant**
- **Performance specifications - Joe Grobler (klein Joe)**
- **AAPA CIP - Erik Denneman**
- **RSA Bitumen rubber Experience - Johan Muller**
- **Review and the way forward - Erik Denneman**

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Visits and site visits :

- **Astec - Plant Melbourne**
- **Fulton Hogan - Asphalt Plant and blending facilities - Brisbane**
- **Puma refinery Brisbane**
- **EME Construction site Brisbane**
- **Informal Q and A session with RSA delegation and AARB on crumbed rubber**



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Closing Remarks

- **Well attended Conference over 500 delegates.**
- **Keynote addresses informative and constructive**
- **Workshop remains effective and interactive participation adds value to discussion points.**
- **Plenary sessions always challenging with choices to make**
- **Australia seriously looking at Rubber technology with NCRT now being available. Rely a lot on SA support.**
- **Hima (EME) – becoming popular in Austrtalia – projects implemented**
- **Site visits conducted gained valuable practical knowledge and experience and technology transfer**



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