



# International Sustainable Pavements Workshop

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# Participants

- ◆ US (15) & Europe (8)
- ◆ Three major theme areas
  - ◆ Each has a “Champion”
  - ◆ Each has a Rapporteur

# “Big picture” Issues

Sustainable (or “green”) roadways	Tomas Harman (FHWA)
Climate change impact on pavement engineering	Kamil Kaloush (Arizona State University)
Measures of pavement sustainability, including	Kevin Gardner (University of New Hampshire) & Paulo Pereira (U Minho, Portugal)
* Life cycle assessment of pavements systems and materials	<b>Rapporteur = Tony Parry</b> (U. Nottingham, UK)
* Carbon footprinting	Howard Marks (National Asphalt Pavement Assoc.)
<i>Pavement-Vehicle interaction</i>	<i>Ulf Sandberg (VTI, Sweden)</i>
Sustainable pavement/ asset management, including	<b>Champion = Gerardo Flintsch</b> (Virginia Tech) & Maurizio Crispino (Politecnico di Milano, Italy)
* Materials resource efficiency	

# Pavement Materials

Soil treatment with non-traditional stabilizers (e.g. enzymes),	Pauli Kolisoja (U Tampere, Finland)
Pavement recycling, including	
* In-place cold recycling	Trenton Clark (Virginia DOT)
* Use of high recycled content	Hussain Bahia (University of Wisconsin)
* Concrete recycling	Bouzid Choubane (Florida DOT)
Warm-asphalt technologies	<b>Champion = John Harvey</b> (University of California, Davis)
Alternative binders (both hydraulic- and bio-binders)	Christopher Williams (Iowa State University)
Rubber recycling	Magdy Abdelrahman (North Dakota State University)
Use of other secondary and recycled products in pavements	<b>Rapporteur = Andrew Dawson</b> (U. Nottingham, UK)

# Pavement Systems

"Quiet" pavements	Larry Scofield (American Concrete Association) & Ulf Sandberg (VTI, Sweden)
Perpetual pavements	Brian Ferne (TRL, UK)
Innovative pavement systems, including pre-fabricated ones	David Lee (University of Iowa) & <b>Champion = Martin van de Ven</b> (TU Delft, Netherlands)
* factory made, instantly deployable	
Special surfaces, including	<b>Rapporteur = Kevin McGhee</b> (Virginia DOT)
* Thin surfacings	Manfred Partl (EMPA, Switzerland)
* High friction surfacings	
Self-sustaining pavements	Eric Weaver (FHWA)

# Timetable

- ◆ 2.5 days
  - ◆ Thursday – Plenary, Theme-by-theme
  - ◆ Friday – Subdivide into themes
  - ◆ Saturday a.m.
    - ◆ bring back findings
    - ◆ glue into “Agenda for Sustainable Pavements”
- ◆ Working days
- ◆ Talking nights (!)

	Thursday 7 <sup>th</sup> January	Friday 8 <sup>th</sup> January	Saturday 9 <sup>th</sup> January
08:30	Introduction ( <i>G Flintsch</i> ) Charge (NSF/FHWA) Agree the Objectives and Outputs ( <i>led by G Flintsch</i> )	Parallel Sessions: Review of Plenary Sessions (Rapporteurs) Discussion	Plenary Session: Presentation of Programs and Roadmaps (Rapporteurs) Discussion
09:00			
09:30	<i>Break</i>		
10:00	Plenary Session: <b>Big Issues</b> ( <i>Champion: G Flintsch</i> ) Presentations (Invited participants)	<i>Break</i>	<i>Break</i>
10:30		Definition of research targets Selection of promising research themes	Integrated roadmap Collaboration Short, medium, long term objectives
11:00			
11:30			
12:00	<i>Lunch</i>	<i>Lunch</i>	<i>Lunch</i>
12:30			
13:00	Plenary Session: <b>Pavement Materials</b> ( <i>Champion: John Harvey (t.b.c.)</i> ) Presentations (Invited participants)	Parallel Sessions: Feedback and Discussion (led by Champions) Prioritization of research objectives (to support research targets)	<i>Departure</i>
13:30			
14:00			
14:30			
15:00	<i>Break</i>	<i>Break</i>	
15:30	Plenary Session: <b>Pavement Systems</b> ( <i>Champion: Martin van der Ven</i> ) Presentations (Invited participants)	Parallel Sessions: To develop Programs and Roadmaps (led by Champions)	
16:00			
16:30			
17:00			