



**LIVERPOOL CENTRE FOR MATERIALS TECHNOLOGY**



**8<sup>th</sup> INTERNATIONAL CONFERENCE  
SUSTAINABLE AGGREGATES, ASPHALT TECHNOLOGY AND PAVEMENT  
ENGINEERING**

**February 18<sup>th</sup> and 19<sup>st</sup> 2009, Liverpool, UK**

**SPONSORED & SUPPORTED BY:**

**Tarmac ♦ Nynas Bitumen ♦ ARKEMA Group ♦ NTEC ♦ Total Bitumen ♦ Ringway ♦  
Jacobs ♦ WRAP ♦ Cemex ♦ Welsh Assembly ♦ The Institution of Civil Engineers,  
Merseyside Branch ♦ The Institution of Highways and Transportation**

**LJMU 2008 CONFERENCE**

The School of the Built Environment at Liverpool John Moores University in association with Tarmac Ltd is hosting the 8<sup>th</sup> Annual International Conference addressing research and practical applications using sustainable construction materials and techniques in pavement engineering. The conference is a continuation of the successful annual events hosted by LJMU since 2002 that have attracted large numbers of authors, delegates and exhibitors from the UK, Europe, Middle East, North America, South America, Australia and the Far East.

**WHO SHOULD ATTEND?**

The conference is aimed at stakeholders with specific interest in the development and management of sustainable infrastructure, environmental protection, energy reduction, developments in concrete and asphalt pavement technology and aggregate recycling initiatives. The conference will be of interest to; environmental regulators, infrastructure clients, specifiers, planners, designers, local authority's, highway related consultants, materials suppliers, construction companies, contractors and educational institutions. The conference will provide a unique setting within which to share and explore new ideas and to review innovations in the practical application of using sustainable construction materials and techniques in pavement engineering with particular interest in the utilisation and use of wastes and secondary materials. It will consider the raw materials, manufacturing techniques and end product characteristics that satisfy ever more demanding design, structural and environmental requirements for development.

**PUBLICATIONS**

The papers will be reviewed by the conference scientific and technical board and published in the conference proceedings. Selected papers will also be refereed and published in a special issue of the refereed International Journal of Pavement Engineering and Asphalt Technology, ISBN 1464-184.

**NETWORK DINNER: Tuesday 17<sup>th</sup> of February; Time: 19:00  
Venue: Ego Restaurant, Hope Street, Liverpool**

**CONFERENCE PROGRAMME**

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**DAY ONE – WEDNESDAY 18<sup>th</sup> FEBRUARY 2009**

Venue: To be confirmed

**08:30 REGISTRATION, REFRESHMENTS & EXHIBITION**

**09:30 Welcome by the Conference Chairman, Professor Howard Robinson, Tarmac Ltd, UK**

**09:35 Opening Address, Professor Michael Brown CBE DL, Vice Chancellor, LJMU**

**MORNING PROGRAMME: Chaired by Professor Howard Robinson, Tarmac Ltd, UK**

**09:40 Dennis Day, Nynas Bitumen, UK, "Cold Mix Recycling"**

**10:05 Juan A. Gonzalez Leon, ARKEMA Group, France, "Warm Mix Asphalt Fabrication With  
Chemical Additives: Laboratory and Field tests"**

**10:30 Tony Parry, NTEC, UK, "Renewable Asphalt Binders"**

## 10:55 Questions, Refreshments and Exhibition

11:35 **Gary Schofield**, Total Bitumen, UK, *"Sustainable Asphalt Production"*

12:00 **Ian Walsh**, Jacobs, UK, *"The Effect of Crumb Rubber in Hot Bitumen"*

## 12:25 Questions, Lunch and Exhibition

### AFTERNOON PROGRAMME: Chaired by Ian Walsh, Jacobs, UK

13:30 **John Barritt**, WRAP, UK, *"Geosynthetics, Sustainability and Low Carbon"*

13:55 **Neil Roberts**, Tarmac Recycling, UK, *"Product Recovery from Utility Wastes, Integrated Solutions, Drivers, Risks and Rewards"*

14:20 **Paul Acock**, Ringway, UK, *"Surfacings for Pollution Control"*

## 14:45 Questions, Refreshments and Exhibition

15:15 **Andy Spencer**, Cemex, UK, *"Carbon Footprint, Innovative Management"*

15:40 **Phil Chatfield**, Welsh Assembly, UK, *"Latest Developments on SUDS Regulation"*

16:05 **Murray Reid**, TRL, UK, *"The Aggregates Quality Protocol: Good Practice"*

16:30 **Bachar Hakim**, Scott Wilson Ltd, UK, *"Airfield Pavement Environmental and Performance Improvement Using French Materials"*

## 16:55 QUESTIONS & CLOSING REMARKS by Professor Hassan Al Nageim, LJMU

### DAY TWO – THURSDAY 19TH FEBRUARY 2009

Venue: LJMU

## 08:00 – 08:30 REGISTRATION, REFRESHMENTS & EXHIBITION PRELIMINARY PROGRAMME

### MORNING PROGRAMME

#### SESSION 1: Chaired by Murray Reid, TRL Ltd, UK

08:30 **Langdale, P.**, TRL Ltd, UK, *"Sustainable maintenance of a UK trunk road using crack and seat and ex situ cold mix recycling – a case study"*

08:50 **Smith M.**, Akzo Nobel Surface Chemistry AB, UK, *"Development of new warm mix technology offering enhanced asphalt properties"*

09:10 **Zhao B.**, University of Wolverhampton, UK, *"Research and design experience in aggregate recycling: Part 1: mechanical properties"*

09:30 **Nagendra, R.**, Loughborough University, UK, *"Development of GIS and GPS based intelligent network-level road maintenance and rehabilitation system"*

09:50 **Yader, A.**, Federal University of Santa Catarina (UFSC), Brazil, *"Evaluation of the ultrasound test for determining the homogeneity of capacity in asphalt concrete slabs"*

## 10:10 Questions, Refreshments and Exhibition

#### SESSION 2: Chaired by Glicerio Trichês, Universidade Federal De Santa Catarina, Brazil

10:40 **Bocci, M.**, Università Politecnica delle Marche, Italy, *"Influence of water on mechanical and adhesive properties of WMA by adding synthetic zeolite"*

11:00 **Behbahani, H.**, University of Science & Technology, Iran, *"Investigation of performance of stone matrix asphalt mixtures containing polymer modifiers"*

11:20 **Ameri, M.**, University of Science & Technology, Tehran, Iran, *"Laboratory investigation of stiffness of hot mix asphalt containing reclaimed asphalt pavement (RAP)"*

11:40 **Kavussi, A.**, Tarbiat Modares University, Iran, *"Characterization of parameters affecting deformation resistance of bituminous mixes"*

12:00 **Wright, A.**, Tarmac Ltd, UK, *"Performance of sub-base materials with increased fines"*

## 12:20 Questions, Lunch and Exhibition

## **AFTERNOON PROGRAMME**

### **SESSION 3: Chaired by Ian Carswell, TRL Ltd, UK.**

**13:25** **Plug, C.**, The Netherlands, *“Warm asphalt mixture trial experience after 5 years”*

**13:45** **Akbarnejad S. & Houben, L.**, The Netherlands, *“Development of an accelerated evaluation protocol for secondary road base materials”*

**14:05** **Fakhri M. & Toosi K.N.**, University of Technology, Iran, *“Fatigue characterization of hot mix asphalt using four-point bending test”*

**14:25** **Williams, B.**, Neath Port Talbot County Borough Council, UK, *“Risk exposure index: useful way for preparing highways annual maintenance programme”*

**14:45** **Ward, A.**, Enterprise plc, Staffordshire Highways, UK, *“Mobile asphalt recycling techniques for in-situ footway repair”*

### **15:05 Questions, Refreshments and Exhibition**

### **SESSION 4: Chaired by Amir Kavussi, University of Science & Technology, Tehran, Iran**

**15:35** **Abtahi, M.**, Isfahan University of Technology, Iran, *“A comparative study on the use of SBS polymers and polypropylene fibres modifying asphalt concrete structures”*

**15:55** **Bailey, A.**, ASI, UK, *“The use of preservation techniques and their affect on the asset. Is this the future for highway maintenance and the means to getting the budgets back on track?”*

**16:15** **Sukalpa Biswas**, Mouchel, UK, *“Permeable pavement for a car park in a floodplain in Milton Keynes”*

**16:35** **Trichês, G.**, Universidade Federal De Santa Catarina, Brazil, *“Effects of rice husk ash on the compressive strength of rolled compacted concrete”*

**16:55** **Carswell, I.**, TRL Ltd, UK, *“Development of best practice guidance for recycling asphalt thin surfacings”*

### **17:15 Questions & Closing Remarks by Professor Hassan Al Nageim, LJMU**

## **CONFERENCE FEES, REGISTRATION & ACCOMMODATION**

Please visit our website [www.ljmu.ac.uk/blt/peat/index.htm](http://www.ljmu.ac.uk/blt/peat/index.htm) or Email: [events@ljmu.ac.uk](mailto:events@ljmu.ac.uk)

## **FURTHER INFORMATION**

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