



The ISAP Reporter

International Society for
Asphalt Pavements

Volume No. 34

December 2008

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ISAP Chairman's Report—Manfred Partl**Let's not get hit by another truck!**

Yes indeed! Daily life is hectic in our brave new world. Too many of us are running around like crazy in our private struggle for a better life or for surviving. At the same time we are too often taking risks such as carelessly crossing the road at yellow or even at a red light not being aware that a big truck could hit us any time. Instead of looking ahead and caring for others we often choose to follow our individual goals in a shortsighted way, thus ignoring clear signs of danger. This is probably the main reason, why, in fact, such a big truck just recently hit us all.

The global financial crisis that struck us hard in a truck-wise manner clearly demonstrated how fragile our economical and technological system is and how densely entangled and interconnected we are in our global network (some may even call it “felt”). However, the fact and understanding that we are all closely depending on each other and sitting on the same lonely planet should strengthen us in forming alliances for finding and implementing solutions. We should also understand that such a crisis should not be an excuse to divert from the much bigger task to fix and take care of our environment with all our force that we have.

ISAP is determined to contribute in this sense, as far as asphalt pavement technology is concerned, providing and expanding connections and interrelations between asphalt experts and professionals both allowing and promoting knowledge and expertise exchange and synergies. Our association is particularly aware of the environmental aspects in our field and has therefore turned much of its focus successfully in that direction in the last year. In fact, for ISAP, the last year was extremely active and with regard to its mission very fruitful. Examples of achievements particularly worth to be listed are:

- The annual meeting of TC *Constitutive Modeling of Asphaltic Materials* (<http://www.insapconmod.nl/>) in collaboration with TRB workshop #110 on 13th January 2008 which was well attended and is a good example of how different organizations should join in search for synergies
- Organizing and conducting the Symposium ISAP2008 August 18th to 20th in Zurich on *Asphalt Pavements and Environment*, which attracted experts from 34 countries from all over the world (<http://www.empa.ch/isap2008>)

ISAP Chairman's Report, contd.

- Progress in organizing the ISAP Nagoya 2010 Conference, such as establishing a web site (<http://isap-nagoya2010.jp/>) and discussing specific organizational matters in more detail.
- Establishing first contacts with candidates for the next ISAP Symposium in 2012.
- The establishing of a new ISAP TC APE *Asphalt Pavement and Environment* that grew out of TG 05 *Re-Use of Construction Materials* of the very successful only ISAP Committee ISAP TC *Constitutive Modeling of Asphaltic Materials*.

This new TC is now organizing itself in four working groups WG's: RAP Recycling (in conjunction with RILEM); By-products and secondary materials recycling in asphalt pavements; Life cycle analysis; New technologies and special environment aspects on asphalt pavements. It is actually establishing a website and preparing workshop in Qingdao, China, August 8, 2009 and possibly also in conjunction with the MAIREPAV6 Conference in Italy and the Conference of the Brazilian Pavement Association October 7-9 in Fortaleza.

- ISAP has also successfully continued to establish further alliances with other organizations. In 2008, an agreement was signed with RILEM the *International Union of Laboratories and Experts in Construction Materials, Systems and Structures* for mutual support in promoting conferences, symposia, proceedings etc in the field of bituminous materials and pavements. ISAP has worked with AAPT to run an international forum during AAPT annual meetings under the ISAP flag. In 2009, this Forum will be held during the AAPT Annual Meeting and Technical Sessions on Tuesday, March 17, 2009. For further information on this Forum and Meeting, see the AAPT website (www.asphalttechnology.org)

I hope that these many achievements give you confirmation that joining and being a member of ISAP has the benefit of belonging to a privileged lively key network for asphalt professionals providing members not only with most up-to-date information on the actual and future state of the art on "hot" asphalt pavement topics but also with an active and dynamic platform to collaborate with experts from all over the world in technical committees on a voluntary basis. Such a network together with voluntary commitment for overcoming future challenges is even more valuable in today's hard times, when everything gets dominated by a financial crisis, in order to avoid that our long term vision gets momentarily blurred and we get hit by yet another even heavier truck in the future.

NEW ISAP Technical Committee Asphalt Pavement and Environment

In addition to the existing successful TC on Constitutive Modeling, a new TC has been formed, the ISAP Technical Committee Asphalt Pavement and Environment

The following proposals, collected during the International ISAP Symposium on Asphalt Pavements and Environment in Zürich, will be the possible topics to base the Technical Committee activity

- RAP in relation to durability issue
- Asphalt production technologies
- Alternative binders, vegetal additives,
- Energy saving & warm/half-warm mixes
- Emissions (fume, water, CO₂)
- Asphalt pavement & Energy production (solar, thermal,..)
- High-rate recycling (performance and equipment)
- Byproducts and waste materials (mix design, construction techniques)
- Permanent recycling
- Noise reduction
- Cold, warm and hot recycling (mix design, mechanical properties, temperature, emulsion type, pavement design, in-place, in-plant,....)
- Moisture damage
- Development of common standards across the world
- Life cycle analysis modeling
- Life cycle cost analysis of new technologies
- Sustainability of construction and maintenance of asphalt pavements
- To awaken Road Authorities to sustainable asphalt pavement
- Environmental restorations of abandoned alignments
- New recycling technologies
- Ageing (mechanism and laboratory techniques)
- Interaction structure and performance
- Durability and stability of recycled mixes
- Results experience sharing
- Standard reviews
- Collection of information (papers, presentation, standards, data,...)

The TC will be sponsor/co-organizer of a workshops after the 3rd International Conference on Asphalt Materials in Qingdao, China in August 8 2009 and other workshops in the different continents are under discussion (e.g. during planned local conference).

Based on the general discussion during the kick-off meeting four potential WG was identified:

- WG 2.1 RAP Recycling, proposed chairman: Chantal de La Roche
- WG 2.2 By-products and waste recycling in asphalt pavement, chairman: to be identified
- WG 2.3 Life cycle analysis, proposed chairman: John Harvey
- WG 2.3 New technologies and special environment aspects on asphalt pavements (solar and thermal energies, noise reduction,), chairman: to be identified

First issue will be to collect people from “outside of asphalt community” (chemists, physicists, environment experts,...)



ISAP Membership News

ISAP membership includes three patron members, one supporting member, 7 student members, 141 members that are both ISAP and AAPT members and 79 Voting members. Nine organizations are corporate members that have various numbers of members depending on their level of corporate membership. There are also three Association members. All members will have the benefits of ISAP membership including membership registration fees for all conferences and symposia. An Association Member has an Ex Officio membership on the Board of Directors. The three Associations are; The U.S. National Asphalt Pavement Association, the Japanese Asphalt Pavement Association and the South African Bituminous Association.

The University of Waterloo has converted all of the Conference Proceedings to CD format. The following CD's have been published and are currently available for purchase. The 7th, 8th, 9th and 10th Conference CDs are \$25 for members and \$100 for non-members. The 1st-2nd, 3rd-4th and 5th-6th CDs are \$35 each or \$100 for all three.

- 10th Conference – Quebec
- 9th Conference – Copenhagen
- 8th Conference – Seattle
- 7th Conference – Nottingham
- 5th and 6th Conf. – Delft & Ann Arbor
- 3rd and 4th Conf. – London & Ann Arbor
- 1st and 2nd- Ann Arbor

For further information on ISAP, please visit the ISAP website at:

www.asphalt.org



Association of Asphalt Paving Technologists (AAPT) Update

AAPT is beginning to implement a Strategic Plan that was developed in 2008 by President Stephen Brown. This plan looks at these items:

- Marketing and Membership
- Annual Meeting
- AAPT Journal
- Management and Administration
- International Dimension

Several Task forces have been developed for each item and are currently being implemented. The progress of the Strategic Plan will be communicated to the AAPT members.

The 2008 AAPT Annual Meeting and Technical Sessions were held on April 27, 30, 2008 at the Hyatt Regency at Penn's Landing in Philadelphia, PA. There were 23 papers presented as well as a Government-Industry Forum (titled "***Practical Issues in Today's Paving World***") and a Symposium (titled "***Implementation of the new Mechanistic-Empirical Design Guide***"). The papers, including discussions, as well as the presentations and pictures from the meeting will be included in the 2008 Journal. The Journal of the 2008 AAPT Annual Meeting and Technical Sessions, Volume 77 is now available. Each AAPT member receives one free copy of the volume. The cost of the volume to others is \$125.00.

The 2009 Annual Meeting is planned for March 15-18, 2009 at the Marriott City Center in Minneapolis, Minnesota. The papers for this meeting were selected at the AAPT Board meeting which was held in Minneapolis on October 28, 2008. The title for the 2009 Symposium is "The Ideal Asphalt Pavement". There will also be an International Forum which will be in conjunction with ISAP during the AAPT Meeting. The list of papers and other information on the meeting is on the AAPT website (listed below)

Also, AAPT currently has 14 CDs which contain the Journals from 1919-1998. Each CD contains 5 volumes and the cost for members is \$25 and non-members is \$100. Contact the AAPT office or website for further information.

The 2008 AAPT Scholarship winners were:

- Silvia Caro, Texas A&M University
- Raul Velasquez, University of Minnesota
- James Willis, Auburn University

The applications for the 2009 Scholarship are due May 1, 2009 and are on the website.

For further information on AAPT, please visit the website:

www.asphalttechnology.org

EATA Conference 2010

2010 EATA Conference

15th-16th June 2010 - Parma, Italy

Chairmen Antonio Montepara, Hervé di Benedetto

Topics

Bitumen and modified properties
Structure-performance for asphalt materials
Asphalt mixture properties
Asphalt durability
Design of asphalt mixes
Accelerated testing
Surface characteristics
In situ and laboratory test
Environmental aspects for asphalt materials
Modeling of pavement materials
Pavement design and evaluation
Vehicle-tyre-pavement interaction
Long-term pavement performance
Nano-technologies in asphalt

Key dates

Paper submission: June 1st, 2009
Notification of review results: November 1st, 2009
Final submission of accepted papers: February 1st, 2010

Publications

Papers will be selected using a rigorous peer review system. Accepted papers will be presented at the meeting and published in a special edition of the International Journal "Road Materials and Pavement Design", which is an ISI indexed publication.

Pre-Conference Short Course

Advances in Pavement Technologies 14th-15th June 2010

For further information contact:

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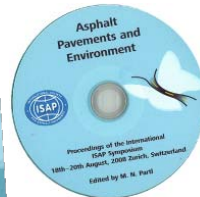
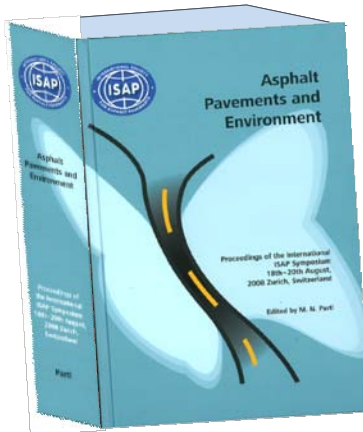
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ISAP 2008 Symposium Summary

ISAP 2008, International Symposium on Asphalt Pavements and Environment, Zürich, Switzerland, August 18th – 20th, 2008



The success of the first Symposium in Auburn in June 2004 encouraged the ISAP to launch another Symposium, the ISAP 2008 Symposium on Asphalt Pavements and Environment in Zürich, Switzerland.

This time the Symposium concentrated on following topics:

- Low energy asphalt mix production and placing
- Emissions and working safety
- Noise reducing pavements
- Drainage and water susceptibility
- Environmentally sustainable new materials
- Repeated recycling and material resources
- Durability and aging
- Innovative design
- Life cycle analysis
- Roads for energy production
- Roads for environmentally friendly winter maintenance

Based on 161 abstracts that were originally offered, 156 authors were invited to submit a paper for being reviewed in a rigorous review. Because of the high quality of these papers it was not easy to choose the 72 papers which were presented at the Symposium. These papers were made available in proceedings in form of a hard cover book of more than 800 pages and a CD

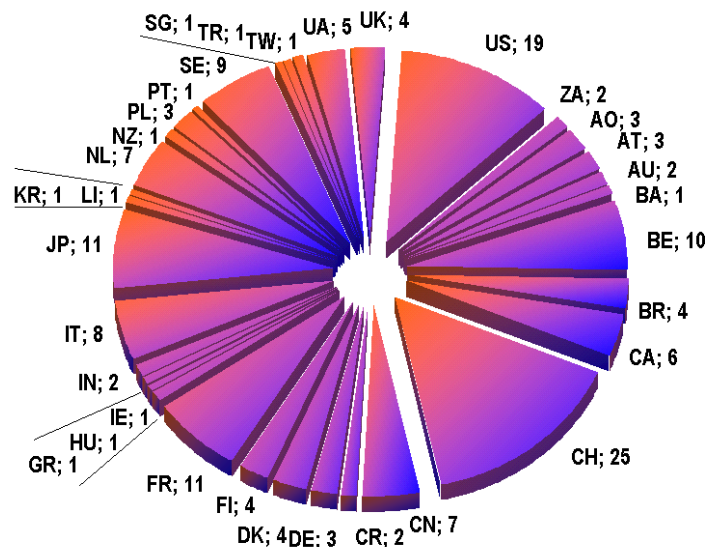
ISAP 2008 Symposium Summary, contd

After the opening address by the current ISAP president Prof. Manfred Partl from Empa, Swiss Federal Laboratories for Materials Testing and Research, and a preview from Mr. Yoshiaki Yano of the next Symposium, which will take place in Nagoya, Japan, in 2010, the Director of Swiss Federal Roads Office, ASTRA, (FEDRO), Dr. Rudolf Dieterle illustrated in his welcome speech a Swiss perspective of asphalt pavement outlining Swiss research priorities and principles of transport policy and emphasizing the importance of international cooperation as a vital element to advance on the road of environmental sustainability.

In his key note lecture, Prof. Gerhard Kennepohl from University of Waterloo, Canada, provided historical background and facts for dealing successfully with environmental asphalt issues in the past. With regard to future direction and opportunities, he made suggestions for new materials and processes based on existing innovative technology such as 'warm asphalts' for reducing energy consumption and emissions or improvement of recycling of asphalt pavements to limit the continuing increase in resource consumption with the goal to achieve sustainability.

In 18 sessions 165 competent and very interested participants from 34 different countries listened to the different presentations on most up-to date experience, knowledge, research results and recommendations and discussed the findings and conclusions from the studies by the different authors. Meanwhile their partners enjoyed a beautiful day visiting the library of the monastery in St. Gallen – a World Heritage – and a chocolate factory nearby – a “cockaigne” for chocolate enthusiasts.

In addition to the Symposium, the kick-off meeting for the new RILEM technical committee “TC NBM, Nanotechnology-based Bituminous Materials” was held at EMPA, in Dübendorf. This committee focuses on questions and new developments governed by the need of finding new solutions and techniques for improving the environmental compatibility of asphalt pavement and for taking advantage from the asphalt pavement from the environmental point of view.



7th International RILEM Symposium

7th International RILEM Symposium on Advanced Testing and Characterization of Bituminous Materials (**ATCBM09**), to be held 27-29 May 2009 in Rhodes, Greece. Also, please feel free to pick any information you need from the Conference website <http://www.ntua-rilem-atcbm09.gr/> , which you can also include with the necessary information as a link in the ISAP Reporter and ISAP website.

Background:

The RILEM Technical Committee 206-ATB: Advanced Testing and Characterization of Bituminous Materials (www.rilem.net) promotes international synergies and coordinates research efforts and encourages researchers and engineers from all over the world to share their knowledge, new experiences and ideas in this symposium.

The 6th RILEM symposium on performance testing for bituminous materials PTEBM'03 in Zurich which was organized by the former TC 182-PEB: Performance Testing and Evaluation of Bituminous Materials revealed that several aspects that should be further investigated in the complex field of performance related binder and asphalt testing as well as in test specimen

SABITA News

SABITA has their latest newsletter available. There is a link to this newsletter on the ISAP website. Please refer to the website for this informative publication.

Below is the Table of Contents of this newsletter:

- ◆ CEO Comments
- ◆ Sabita funds HiMA research
- ◆ N3 rehabilitation at Mariannahill
- ◆ Sabita directors
- ◆ Warm mix asphalt trials for KZN
- ◆ Sabita's Code of Conduct
- ◆ Local and international events
- ◆ Asphalt rideability - a contractor's perspective
- ◆ Asphalt Academy initiatives gain momentum
- ◆ Gradings and new sieve sizes
- ◆ Feedback from international conferences
- ◆ Sabita focus on safety issues
- ◆ Sabita publications
- ◆ New Sabita members
- ◆ Sabita members

5th Anniversary of the ISAP Technical Committee on Constitutive Modeling of Asphaltic Materials

The ISAP TC had its 5th anniversary this year. After the inauguration of the TC in 2003 by Tom Scarpas (Delft University of Technology) and Andrew Collop (Nottingham University, UK), it has evolved into a mature committee with enthusiastic members with academic as well as industrial backgrounds from over 20 different countries. The TC consists of the following 6 Working Groups:

WG01 on Foam Asphalt

Coordinator: Andreas Loizos, National Technical Uni of Athens, Greece

WG02 on Water Damage in Asphaltic Mixes

Coordinator: Niki Kringos, TU Delft, The Netherlands

WG03 on Shared Testing Program for Constitutive Modeling

Coordinator: Terhi Pellinen, Helsinki Uni of Technology, Finland

WG04 on Reinforcement of Asphalt

Coordinator: Imad Al-Qadi, University of Illinois at Urbana-Champaign

WG05 on Re-Use of Construction Materials

Coordinator: Manfred Partl, EMPA, Switzerland

WG06 on Chemo-Mechanics of Bituminous Materials

Coordinator: Jack Youtcheff, FHWA, USA

WG07 on Bitumen and Mastics

Coordinator: Hussain Bahia, University of Wisconsin at Madison, USA

The TC is holding its **annual meeting** on the Sunday before TRB (11 January 2009) at the Marriot Hotel, Balcony D, 09:00am – 12:30pm. During the meeting the coordinators of the WGs give an update on the activities of the past years and the planned events for the coming year. All ISAP members are invited to attend the meeting. A few of the highlights are listed in the following:

In July 2008 **WG02** had a focused meeting at TU Delft in which the developed approaches of Texas A&M and TU Delft were discussed in detail. The members of this WG are continuing the effort to propose a unified approach for both short- and long term prediction of moisture induced damage. Also, a focused collaboration has started between the research group of the Advanced Materials Laboratory of AASHTO and the Group of Mechanics of Infrastructure Materials, TU Delft, to utilize Finite Element aided analyses to investigate the variability of the Modified Lottman test and to develop recommendation for improvements.

Members of the **WG06** met at Ooms Nederland Holding, Hoorn, The Netherlands, in May 2008 to develop an advanced constitutive model and characterization techniques to quantify and explain chemo-mechanical processes in bitumen. In August 2008, members of the WG received a 200.000 Euro grant of the Dutch National Science Foundation to continue the work on this topic the coming three years.

WG07 was initiated last year and had its first meeting on January 15th, 2008 in Washington DC, during the TRB annual meeting. Members of the WG have started setting up a test results database and database containing publications of interest to this group. The second meeting of the group took place on August 20th, 2008 in Zurich, during the ISAP Symposium. The members have identified the need for a “state of the art” document on mastic and binder properties. During the January 2009 meeting the work of the group for the next year will be outlined.

The TC is sponsoring a new course from the International Course Series on Advanced Constitutive Modeling of Pavement and Soil Engineering Materials. This **short course** shall be given at Texas A&M University, USA, on 21-25 September 2009 on the topic of Advanced Constitutive Modeling and Characterization of Asphaltic Materials. Registration for the course opens in January 2009.

More information about all these activities can be found on the website of the TC:

<http://www.isap-tc-conmod.org>

Upcoming Events

2009

11-15 Jan. 2009 - 88th Annual Meeting of Transportation Research Board, Washington, DC,
www.trb.org

18-21 Jan 2009 – NAPA 54th Annual Meeting, San Diego, California
www.napa.org

9-12 March 2009 World of Asphalt, Orlando, FL www.worldofasphalt.com

15-18 March 2009 - Association of Asphalt Paving Technologists (AAPT) 84th Annual Meeting, Minneapolis, Minnesota, USA www.asphalttechnology.org

27-29 May 2009 – RILEM International Symposium on Advanced Testing and Characterization of Bituminous Materials , Rhodes, Greece
www.ntua-Rilem-atcbm09.org

8-10 July 2009 – Mairepav6 -- The 6th International Conference on Maintenance & Rehabilitation of Pavements, Torino, Italy www.mairepav6.it/uk

2010

8-12 February 2010 – PIARC 2010 Winter Road Congress, Quebec City, Canada
Www.aipcrquebec2010.org

6-9 March 2010 - Association of Asphalt Paving Technologists (AAPT) 85th Annual Meeting, Sacramento, California USA www.asphalttechnology.org

1-6 August 2010 I SAP 11th Conference on Asphalt Pavements, Nagoya, Japan
<http://isap-nagoya2010.jp/>

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