



BITUMEN CONFERENCE

19th of February 2015

*Tallinn University of Technology, U01-202
Ehitajate tee 5, Tallinn, Estonia*

AGENDA

- 09:30 – 10:00 Registration
- 10:00 – 10:15 Conference Welcome
Mr Aivo Adamson, Director General, Estonian Road Administration
- 10:15 – 11:15 An overview of conducted studies and on-going research in bitumen and asphalt mixtures, comments on bitumen and asphalt mixtures suitable for Estonian climate
Prof Hussain Bahia, UW-MARC, USA
- 11:15 – 12:15 Bitumen research in Estonia
Mr Sven Sillamäe, TTK University of Applied Sciences/Tallinn University of Technology, Estonia
- 12:15 – 13:15 Lunch
- 13:15 – 14:15 Results of bitumen research in Lithuania
Dr Miglė Paliukaitė, Vilnius Gediminas Technical University/Queens University, Lithuania/Canada
- 14:15 – 14:45 Coffee break
- 14:45 – 15:45 The role of bitumen in asphalt mixtures
Prof Terhi Pellinen, Aalto University, Finland
- 15:45 – 16:30 Panel discussion and closing

Conference language: English



OVERVIEW of PRESENTATIONS



Prof Hussain U. Bahia, Ph.D., University of Wisconsin-Madison, MARC (Modified Asphalt Research Center), USA

An overview of conducted studies and on-going research in bitumen and asphalt mixtures. Comments on bitumen and asphalt mixtures suitable for Estonian climate.

How US has reached to currently valid standards and requirements in asphalt mixtures and bitumen. An overview of conducted studies and on-going research in bitumen and asphalt mixtures. What should be the binder properties in pavements. What should be the composition of asphalt mixtures to ensure a 20-30 year long lifespan of pavements. Test results of different asphalt mixtures and test sites. Comments on bitumen and asphalt mixtures used in Estonia, and mix design suitable for our region based on the expertise of UW-MARC.



Sven Sillamäe, lector, TTK University of Applied Sciences/Tallinn University of Technology, Estonia

Bitumen research in Estonia.

Bitumen research in Estonia. Description of the conditions in Estonia, the start of the research, intermediate stages, current status of the research, future steps.



Miglė Paliukaitė, Dr., Vilnius Gediminas Technical University/Queens University, Lithuania/Canada

Results of bitumen research in Lithuania.

Overview of bitumen research and studies in Lithuania. Description of the on-going study in Ontario (Canada).



Terhi Pellinen, Ph.D., Eur.Ing., Professor of highway engineering, Geoengineering research group, Aalto University, Finland

The role of bitumen in asphalt mixtures.

Research and experience on asphalt mixtures in Finland, plans for the future. The role of bitumen in asphalt mixtures. Asphalt mixtures suitable for Nordic climate. The future of the asphalt mixtures design. What are today's weaknesses. Properties that should be measured for asphalt mixtures and possible options for measurements. How to improve the lifespan of asphalt mixtures - is 20-30 years realistic. How to overcome the negative impacts caused by studded tires.

Panel discussion

- What is the ideal binder in asphalt mixtures apart from bitumen?
- How to ensure a product with similar characteristics to bitumen in asphalt mixture, regardless of its origin?
- Modification of bitumen – which properties should be improved in bitumen and different options?