

2nd INTERNATIONAL CONFERENCE ON

ASPHALT 4.0

MADRID

26-27 SEPTEMBER 2023

Asefma and ZAS, in collaboration with EAPA, are pleased to invite you to the second “International Conference on Asphalt 4.0”

Organised by:



Združenje asfatterjev Slovenije
Slovenian Asphalt Pavement Association

Supported by:



FINAL PROGRAMME



Meeting Place (c/Orense
34, Madrid)

Asefma and ZAS, in collaboration with EAPA, are pleased to welcome you to the “2nd International Conference on Asphalt 4.0” (#ICA4point0) where the latest technologies related to digital transformation of the asphalt paving sector will be presented and analysed.

This second edition of the International Conference on Asphalt 4.0 of September 26th and 27th in Madrid is a continuity of the initiative Asefma launched on May 11th 2020 in the same city.

However, as in the first edition, the event will expand to broader dimensions to achieve proportions on international scale in line with the thematic area.

For this reason, the event is organised in close collaboration with the working group “Asphalt 4.0” of EAPA, as the driving force of the digitalisation of the our industry.

During the two day duration of the “2nd International Conference on Asphalt 4.0” we will offer all participants the opportunity to increase their knowledge by expert speakers, presentation of technologies and round tables.

The event will be developed under the PDV model (presential+digital+virtual), and can be attended

- Presentially, at Meeting Place, Orense 34 Madrid (Spain)
- Digitally, by HD streaming and social media with hashtag #ICA4point0
- Virtually, by means of an application or App, where attendees may interact in real time, follow the conferences and pose questions to the speakers, visit the exhibition area, amongst others

The programme also includes a real exhibition zone and demonstration sessions for state-of-the-art technologies during the afternoon sessions.

Organisations and entities will present their cutting-edge digital technologies that imply any advance which may be considered 4.0 in the asphalt industry.

We will also present digital solutions or applications of digital technology which may lead to improving conditions of the workers, our clients and the road users.

The “International Conference on Asphalt 4.0” also seeks to be the ideal setting for R&D&I projects that are being implemented to develop digital solutions to present their advances to the asphalt community.

The virtual tool will also offer a space to present projects interactively.

Asefma, ZAS and EAPA seek going one step further to boost our industry by training and attracting young people to our sector. A digital revolution like this will open future working lines to attract young talent.

We want this “2nd International Conference on Asphalt 4.0” to continue being the starting point of training and development programmes for future professionals to find their way in this new asphalt industry.

Juan José Potti
Executive President
Asefma

Slovenko Henigman
President
ZAS

#ICA4point0

Tuesday, 26th September 2023

9.00 Opening Session

- **Xavier Flores** (Secretary General of Infrastructures of MITMA)
- **Juan José Potti** (President of Asefma)
- **Slovenko Henigman** (President of ZAS)

9.30 Key lecture "Cooperative, connected and automated mobility (CCAM) for road asset management"

- **Xavier Flores** (Secretary General of Infrastructures of MITMA)

9.50 Session 1. Cooperative, connected and automated mobility (CCAM) *Coordinated by Slovenko Henigman*

Roundtable: Challenges and opportunities for road administration and enterprises about CCAM

- **Carsten Karcher** (EAPA)
- **Miguel Caso** (PIARC)
- **Juan José Potti** (Asefma)

Coffee break

10.45 Key lecture "Digital tools for road inspection"

- **Enrique Miralles** (AEC)

11.15 Session 2. Digitalized inspection and evaluation of road condition *Coordinated by Breixo Gómez*

11.35

- Visual Inspection indexes obtained by Computer Vision monitoring. Ibon Aretxalde, Asimob
- Optimize pavement monitoring and maintenance using artificial intelligence (ROADCARE). Nuria Uguet, Eurovia
- Data quality obtained by the IPAVE during comprehensive measurements of road infrastructure conditions. Aljoša Luis, ZAS/NovaGteh
- INFRADIAG: A Pavement Monitoring and Assessment Solution based on AI and Expert Engineering. Rafael Martínez, Eiffage

- 12.35** **Key lecture** “Management of urban pavements in Madrid with digital tools”
- **Jose Miguel Baena** (Madrid City Council)
- 12.55** **Key lecture** “Traffic and road conditional analysis with floating vehicle data”
- **José Carlos Valdecantos** (Xouba)
- Roundtable:** Disruption on road asset management
- 13.15**
- **Carsten Karcher** (EAPA)
 - **Ralf Pomp** (EAPA)
 - **Enrique Miralles** (AEC)
 - **José Carlos Valdecantos** (Xouba)
- Lunch**
- 13.55** **Key lecture** “State-of-the-art Vehicle Onboard Analytics and Road Perception”
- 15.00**
- **Björn Zachrisson** (Nira Dynamics)
- Session 3.** Technology suppliers and market uptake for innovative products
Coordinated by Carsten Karcher
- 15.20**
- Digitized road construction. Optimized processes & Improved efficiency. Thiberio Tanus, Dynapac
 - The digital value chain between construction site and mixing plant in practise.
Thomas Leopoldseder, Q-Point
- Key lecture** “Driving the Future: AI Revolutionizing Roads and Mobility”
- 16.20**
- **Matías Cordero** (Microsoft)
 - Energy consumption at asphalt plants in Slovenia, reduction of emissions and costs.
Nika Matul, ZAS/Sloman
- 16.40**
- Lasting asphalt mixtures “rehabilitation of roads and roadways with low traffic in cold and/or rainy weather and long distances”.
Adrian Cabrera, Technical Advisor, Cirtec
 - How to save energy, CO2 and costs with modern Transport Technology in Asphalt Construction and Installation.

Martin Fliegl, Fliegl

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17.25

Roundtable: Connectivity and integration of road construction equipment

- **Thiberio Tanus** (Dynapac)
- **ACEA**
- **Björn Zachrisson** (Nira Dynamics)
- **Eiffage**

**Wednesday, 27th
September 2023**

9.00

Session 4. Digitalisation and quality control
Coordinated by Jose Luis Peña

- Integrated digital value chain as a contribution to sustainable road construction.
Thomas Leopoldseder, Q Point
- The influence of digitalisation on laboratory and quality control activities...
Ersun Görener, Infratest

9.30

Key lecture “Digital Product Passport (DPP)”

- **Aitor Aragón** (UNE)

9.50

Key lecture “Road monitoring and management based on Big Data and Data AnalyticsI”

- **Miguel Caso** (PIARC)

10.10

Roundtable: Digital management of information in road works and laboratories

- **Thomas Leopoldseder** (Q Point)
- **Ersun Görener** (Infratest)
- **Aitor Aragón** (UNE)
- **Miguel Caso** (PIARC)

10.40

Coffee break

11.10

Session 5. Safety at work zones
Coordinated by Jose Luis Peña

- Artificial Intelligence applied to safety in mobile work equipment (SAFETYPAV project).
Jose Ramón Albert, Pavasal

- Active Safety Systems for Work Zone Safety.
Jose Manuel Cámara, Aplicaciones

11.40

Key lecture “Test sections on the Junta de Andalucía’s roads with sustainable, automated and intelligent asphalt materials MASAI”

- **Fernando Moreno** (UGR)

Session 6. 4.0 Projects & Digitalisation

Coordinated by Juan José Potti

12.00

- H2020 CAPRI project. Cognitive Solutions in Process Industry: Asphalt Use Case.
Rafael Martínez, CAPRI
- H2020 OMICRON project. Road management platform.
José Solís, OMICRON
- HORIZON EUROPE CIRCOPAV project: circular and connected pavements for carbon-neutral and digital roads.
Mayka Rubio, UGR

Session 7. Digitalisation, a call for new generation talent

Coordinated by Juan José Potti

12.45

Roundtable: Digitalisation for training and career development

- **Mayca Rubio** (UGR)
- **Manuel Romana** (UPM)
- **Breixo Gómez** (EAPA)

Session 8. Digital twins

Moderated by Breixo Gómez

13.25

- Towards a Digital Twin architecture for the Hot-Mixed-Asphalt production process. Jorge Salas, Padecasa
- Research and development of an integral system for monitoring, diagnosis and prediction of road state using the digital twin model.
Aida Marzá, Becsa

Closing session

13.55

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