





Smart Factories of Tomorrow:

Transitioning to Industry 4.0/5.0

26 March 2025 | 09:30 - 13:00

University Foundation, Meeting Room A Rue d' Egmont 11, 1000 Brussels

The conference will focus on the future of smart factories and their broader societal impact. Specifically, it will explore the role of smart factories within the EU's research and innovation agenda, highlighting key initiatives at the EU level and the responsibility of Smart Specialisation Strategy in supporting these factories. Additionally, the event will offer a unique opportunity to learn from outstanding examples of smart factory research and innovation from Slovenia and beyond.

Programme

09:00 - 09:30 Registration of participants

09:30 - 09:40 Welcoming remarks

Asst. Prof. Dr. Draško Veselinovič - President of the Management Board, Slovenian Business & Research Association

09:40 – 09:55 Strategic Research Innovation Partnership Factories of the Future in Slovenia & Advances in Intelligent Robotics: Adaptive Systems, Al-Driven Machine Vision, and Industry Digitalisation

• Asst. Prof. Dr. Igor Kovač – Director of the Strategic Research-Innovation Partnership (SRIP) Factories of the Future in Slovenia and head of the Center for Research and Innovation Partnership at the Jožef Stefan Institute

9:55 – 10:15 Presentation of European Institute of Innovation and Technology (EIT) Manufacturing

 Ms. Caroline Viarouge – Chief Executive Officer, EIT Manufacturing

10:15 – 10:25 Driving the Transition to Industry 4.0/5.0: Advanced Technologies for Low-Carbon, Digital, and Energy-Efficient Production

 Prof. Dr. Niko Herakovič – Chair of manufacturing technologies and systems, Faculty of Mechanical Engineering, University of Ljubljana

10:25 – 10:45 Industry 5.0 from the EU perspective

 Dr. Zuzana Dutkova – Policy Officer, European Commission, DG Research and Innovation, Industry 5.0 and AI in Science Unit

10:45 - 11:00 Coffee Break

11:00 – 11:10 Advanced Materials and Quantum Technologies: Enabling Electronics, Green Energy, and Next-Generation Innovations

Prof. dr. Matjaž Spreitzer – Head of Advanced Materials
 Department, Jožef Stefan Institute

11:10 – 11:20 Made in Europe – State of Play

 Mr. Željko Pazin – Executive Director, European Factories of the Future Research Association (EFFRA)

11:20 – 11:30 Innovative Laser and Photonics Technologies: Flexible Laser Systems, Digital Processing, and Advanced Optical Fibre Solutions

 Prof. Dr. Rok Petkovšek – Head of Laboratory, Faculty of Mechanical Engineering, University of Ljubljana

11:30 – 11:40 Flexible assembly technologies – skill-based robot programming, computer vision and operator information support

 Maarten Witters – Research Fellow ProductionS, Flanders Make - Smart Factory Benelux

11:40 – 11:50 Transforming Toolmaking: Advanced Technologies, AI-Driven Mechatronic Tools, and Additive Manufacturing for Global Value Chains

 Dr. Aleš Hančič – Managing, Director, TECOS, Slovenian Tool and Die Development Centre

11:50 – 12:00 Bridging the Physical and Digital Worlds: Control Technologies for Factories of the Future and Green Energy Solutions

 Dr. Miha Glavan – Chief Research Officer at KC STV & Researcher at Jožef Stefan Institute

12:00 – 12:10 Advanced Plasma Technologies: Surface Treatment, Coatings, and Innovative Applications in Health, Agriculture and Liquid Processing

 Asst. Prof. Dr. Ita Junkar – Research Associate, Jožef Stefan Institute

12:10 – 12:15 **Q&A** and discussion

12:15 – 13:00 Walking lunch with networking









