



MOBILITY & PRODUCTION

Fields of Expertise TU Graz

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Rudolf Pichler,
Mobility & Production

Source: Lunghammer – TU Graz

The most wonderful thing this summer was being able to meet people again and to work without masks for a longer period.

There were two events worth mentioning in the FoE Mobility & Production where we had the opportunity for an intensive exchange of knowledge.

In the middle of July the Institutes of Automotive Engineering and of Thermodynamics and Sustainable Drive Systems organised a symposium with more than 40 PhD students presenting and discussing their results on vehicle and drive technology. In September, our university once again hosted a conference and showed the latest research results in the area of Mobility and Production. Our FoE participated with six speeches and three posters.

There is also good news in the area of funding. The Institute of Production Engineering, which also runs the smartfactory @tugraz together with Vienna University of Technology and the JKU University in Linz, was able to win a five-year funding programme to network their pilot factories in order to generate sustainable innovation on basis of the new European Platform Gaia-X. This funding programme goes hand in hand with the article that follows, which gives deeper insights into the new era of industry 5.0. It shows that TU Graz is again proactive in this new dimension of using highly up-to-date technology in order to create competitive worlds of production. ●

Matthias Wolf, Rudolf Pichler

Smart Production: The Jump-Off Base for Industry 5.0

One could discuss whether the latest industrial revolution (Industry 5.0) launched by the EU commission already deserves a full digit rise, but one thing is evident: It is the smart world of digitalization (Industry 4.0) which is the powerful enabler of these new 5.0 topics, comprising resilience, human-centric work and sustainability. What TU Graz is doing exemplarily in these new fields of research will be introduced here in the following.

SMART PRODUCTION ON ITS WAY TOWARDS INDUSTRY 5.0

More and more companies have arrived in the world of smart production with its borderless benefits of communication and interaction. There seems to be no limit when leaving the former strict hierarchy of the automation pyramid and using the new forms of collaboration and ICT

based interconnection of facilities either within an independent company or even better across the value chain of a series of companies.

All the advantages of this networked operations (global CPPS) aside, there has been a missing something that is at least of the same importance and necessity for



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