

***Special Session (SS18) on:  
Regional and urban innovation  
ecosystem by Industry 4.0 & 5.0***



**Organizer:**

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**The purpose and scope of the special session**

The transforming relationship of industries, regions and cities is connected to re-discovering the value of industrial value chains by advanced manufacturing and services. They provide high-quality services and opportunities for individuals and communities, with impact on regional competitiveness and social cohesion on the one hand and on structure and usage of urban spaces on the other.

The main drivers of this transformation are: customization and personalisation, convergence between production and services; iterative, “simultaneous” engineering and innovation; emerging of value (incl. circular) networks; increasingly shorter technology, product and factory life cycles; and the proximity of talent as major factor to choose locations for key operations and strategic collaborations.

The aggregated transformation impacts local business models and regional value networks as well. It changes how manufacturing innovation, engineering, and design of implementation and widespread adoption of deep-tech based solutions is managed and supported by businesses, and by ecosystem providers and support organisations. E.g. the new E-DIH concept of the EU highlights the role of orchestrators, the provision of test-before-invest services, the coordination between training, testing and incubation, across organisational boundaries and sectoral silos.

The presentations in this session shall contribute to the understanding of the changing landscape of regional “mission-driven” interventions and development tools. We expect contributions that introduce the main features of the Industry 4.0 and 5.0 concepts, including the modules and layers of the technologies, also impacts on business models and partnerships.

Since the Industry 5.0, according to the EU definition (and even more to the Japanese model of Society 5.0) are essentially social concepts, the three main areas of I5.0 – sustainability, human-centricity and resilience – should be discussed, highlighting that I5.0 goes beyond technological modernisation. Presentations can also promote fair and diverse employment opportunities; circular integrations along the material streams; co-design with customers and final users; hyper-flexible engineering and operational capabilities and short supply networks; cross-sectoral collaborations and community embeddedness.

**Key topics:**

- Regional innovation ecosystems: accelerating implementation and proliferation of deep tech in SMEs and PAs (Public Authorities)
- The European Digital Innovation Hub (EDIH) as a model instrument for development
- Manufacturing value networks
- Serving regional and urban ecosystem with advanced technologies, like smart production plants, smart products, IoT in manufacturing and intelligent processes
- Smart specialization at local and regional level and Open Discovery Process
- Urban and regional production strategies
- Industrial clusters and deep-tech adoption
- Accelerating transformation of industrial value chains
- Promoting business models and collaborations for circular production
- Industrial resilience on regional level
- Strategies and development tools for supporting upskilling and reskilling at local and regional level
- Human-centred manufacturing regions
- Urban and regional manufacturing
- ...any value added topics of the regional and urban innovation ecosystem by Industry 4.0 & 5.0

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