CALL FOR PAPER – JOURNAL OF THE KNOWLEDGE ECONOMY

Special Issue "Intelligent Technical Systems"



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Max. Length: About 10 pages within provided template



Deadline Full Paper (Part 2): May 31st, 2<u>021</u>



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Peer Review

Contributions are evaluated by a pool of researchers and practitioners with academic background

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This special issue focuses on technology concepts that bridge the gap between traditional industrial machinery and modern information and communications technology: Intelligent technical systems emerging from the ongoing Digital Transformation. Manufacturing companies focused on hardware-based products are faced with the challenge to incorporate new technologies into their products as a result of digitalization. Likewise, internal processes and corporate structures are being transformed in a radical way and at a fast pace. Affected industries include e.g. mechanical and plant engineering, the automotive industry and automation equipment.

We invite researchers as well as practitioners to share their experiences and research results in the field of intelligent technical systems and digitalization of manufacturing. The content of contributions can be results from studies, methods and tools and reports from applied research as well as from early to mature stages of development of intelligent technical systems.

The special issues is divided into different parts with certain topics and deadlines - for the upcoming parts see next page.



Part 1 – Foresight and Technology Planning

(Deadline Full Paper: March 31st 2021)

We would like to ask for contributions on methods and tools for future-oriented corporate planning, innovative applications and field reports as well as on intensive dialogue between science and industry. These include the following topics:

- Digital Platforms
- Methods of Market Research and Simulations
- Strategic Early Forecast
- Scenario-Technique
- Technology Monitoring

- Open Innovation
- Frugal Innovation
- Cross-Industry Innovations
- Innovation Management
- Knowledge Bases and Information Services for the Development of Strategy





Part 2 – Artificial Intelligence in Product Development (Deadline Full Paper: May 31st 2021)

The quality and efficiency of Product Development processes can be significantly increased through the use of artificial intelligence. We would like to ask for contributions on bridging the gap between Artificial Intelligence and Product Development. These include the following topics:

- Ideation with AI
- Systems Engineering with AI
- Intelligent Engineering Tools
- Automated Engineering
- Generative Design

- Complexity Management with AI
- Apps for Product Development
- New roles and Competence for Future Product Development

Not finding your topics within the upcoming parts?

The Journal of the Knowledge Economy (JKEC) offers a new Topical Collection on "AI in the Knowledge Economy and Society". Please contact us for more information!