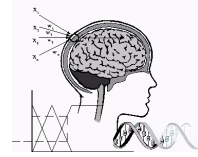




# International

*Innovation in Knowledge Based and Intelligent Engineering Systems*



## INVITED SESSION SUMMARY

**Title of the Session:**

Modern technologies, intelligent systems, and human impact on the transformation of contemporary organisations

**Name, Title and Affiliation of Chair:**

Chair: Ph.D. Grzegorz Chmielarz, Czestochowa University of Technology, Faculty of Management, Department of Management Information Systems

**Details of the Session (including aim and scope):**

Contemporary organisations are operating in an era of unprecedented technological transformation, where artificial intelligence, automation, data analytics, and machine learning are reshaping managerial practices and decision-making processes. The integration of intelligent tools and systems into management opens vast opportunities for efficiency, predictive insights, and innovation — but also introduces new challenges concerning ethics, trust, data governance, and the evolving role of the human manager.

This invited session aims to explore the interplay between intelligent technologies and human management competencies in shaping the organisations of the future. It will address both the technological and human dimensions of modern management, focusing on the ways AI-driven tools, automation, and advanced analytics support — and sometimes redefine — organisational decision-making, leadership, and strategy.

The session encourages discussion on the responsible use of AI, the design of hybrid (human–machine) decision systems, the management of data as a strategic resource, and the balance between algorithmic efficiency and human judgment. The theme also encompasses broader topics, such as the ethical implications of automation, the rise of robotics in management processes, and the emergence of new organisational models driven by intelligent technologies, while not neglecting the human aspect of these ongoing processes.

**Main Topics (suggested areas include but are not limited to):**

- Intelligent support systems in strategic and operational management
- AI, machine learning, and deep learning applications in decision-making
- Human–machine collaboration and hybrid decision environments
- Automation and robotisation of management processes
- Predictive analytics and data-driven leadership
- Managing digital transformation and data-centric organisations
- Ethical, legal, and social aspects of intelligent management tools
- Balancing automation with human creativity and intuition
- Emerging threats and opportunities in AI-supported management
- Intelligent systems for sustainability and resilience in organisations
- Data management challenges and information security in intelligent enterprises
- Trust, transparency, and explainability in AI-supported decisions
- The role of intelligent technologies in Industry 5.0 and human-centred innovation
- Case studies of AI integration in organisational management

Academics, researchers, and practitioners are invited to share their experiences, models, and case studies related to intelligent tools and systems in management. Contributions that explore the coexistence of human and technological factors in organisational success are especially welcome. Other institutions and research groups from around the world are welcome to participate.

**Main Contributing Researchers / Research Centres (tentative, if known at this stage):**

**Czestochowa University of Technology**  
**The Gdansk Tech**

**University of Lodz**  
**Lviv Polytechnic National University**  
**Prague University of Economics and Business**

**Website URL of Call for Papers (if any):**

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