28th International Conference on Knowledge-Based and Intelligent Information & Engineering Systems - KES 2023

11th - 13th September 2023

Special Session "Information, Innovation and Technology as a basis for sustainable business and society"

Chair:

Prof. Katarzyna Szopik-Depczynska University of Szczecin, Poland <u>katarzyna.szopik-depczynska@usz.edu.pl</u> **Co-Chaired by:** Prof. Katarzyna Cheba West Pomeranian University of Technology, Poland <u>Katarzyna.cheba@zut.edu.pl</u>

Special Session Information

The development of IT systems caused many changes in the shaping innovation and technological activity of enterprises. This is related to the digitization of innovation processes and the use of IT in the process of communicating with customers and creating innovations with their help (e.g. through crowdsourcing, co-creation processes, or user-driven innovation). Additionally, an important issue is knowledge handling (emerging direction of innovation system and storing). All these activities, in turn, are not detached from the contemporary realities and conditions of the functioning of enterprises, with particular emphasis on the 2030 Agenda for sustainable development. R&D activities in enterprises, efficient application of innovation and other knowledge-based activities, using IT tools as part of creating innovations, as well as digitization of innovation processes enable survival and winning a better position in the international market. The stimulation of R&D and innovative activities using IT and knowledge -based tools and systems can constitute a basis for improvement in the competitive advantage of companies in domestic and international markets. This Special Session will comprise a selection of papers addressing approaches to IT usage in innovation activity and knowledge-based innovation systems of enterprises and economies within Agenda 2030 towards sustainable world. Covered topics include:

- Increasing relevance of environmental protection and sustainability issues also in terms of creating sustainable innovations
- Intelligent systems and artificial intelligence in human business
- Intelligent systems for a sustainable business and society
- Behavioral aspects of intelligent systems and artificial intelligence applications in business
- Business in virtual and augmented reality
- Industry 5.0 interaction and collaboration between man and machine
- The role of ontology and modern knowledge handling method,
- Knowledge and knowledge ontology evaluation methods, innovation business models, R&D,
- New product development and technological innovation and determinants of innovation and knowledge-based activity with the use of IT technologies,

Papers selected for this Special Session are subject to a rigorous peer review procedure, with the aim of rapid and wide dissemination of research results, developments, and applications.

Keywords

knowledge, IT systems, innovation; R&D; knowledge handling, knowledge ontology evaluation techniques, development; new product development; R&D internationalization; globalization; sustainable innovation, responsible innovation, competitiveness; technological innovations; business innovation; Industry 5.0, sustainable business and society, artificial intelligence