



# PRO-VE 2022

## 23rd IFIP/SOCOLNET Working Conference on Virtual Enterprises Collaborative Networks in Digitalization and Society 5.0

### Special Session on Collaborative Networks in Agri-food 5.0

**Scope.** As with the Industry 4.0 and Agri-food 4.0 concepts, the next revolution 5.0 should evolve and adapt to one of the most relevant sectors for the economy and society through the Agri-food 5.0. For that, it is necessary to explore how new features of industry and society 5.0 can better support collaborative decision-making processes in agri-food supply chains.

The focus is on designing systematic approaches to waste reduction and supply chain efficiency, two concepts related deeply to the sustainability domain. It is necessary to achieve mass customization with high-quality greener solutions and more collaborative, ethical, and human-centred design. The promotion of the human-machine relationships introducing intelligence and innovative human perspective in a highly automated environment with collaborative robots (cobots) should be explored. Real-time data obtained for the automated system should be accompanied by the development of models capable to extract and use the inner knowledge so to improve the efficiency, accuracy, robustness, and resilience of the collaborative agri-food supply chains. This type of models plays a crucial role since the agri-food sector is affected by multiple sources of uncertainty and risk, sometimes impossible to reduce or eliminate, which threaten its sustainability. To improve the resilience and sustainability of agri-food supply chains, collaborative decision-making processes in a hybrid human-machine environment supported by optimization and Artificial Intelligence methods should be designed. This session is focused on papers addressing research and applications that provide insights into how Industry 5.0 and Society 5.0 features applied to agri-food supply chains can help to improve their knowledge management, sustainability, resilience and customer satisfaction. Topics of interest include, but are not limited to:

- Digitalisation and Artificial Intelligence applied to agribusiness collaborative networks
- Supply chain optimization in the context of agri-food 5.0
- Collaborative, resilient, and sustainable business models and agri-food systems
- Collaborative agri-food supply chain risk management
- Digital Modelling of the food value chain
- Agri-food 5.0 enabling technologies for collaborative decision-making
- Agri-food 5.0 drivers
- Collaborative Decision Support Systems for agri-food supply chains
- Application or case studies of collaboration and digitalisation in food supply chain and agribusiness

#### Session Organizers:

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#### Submission procedure:

Special sessions are included in the main Conference and follow the same reviewing process.

- Abstract Submission - March 19, 2022
- Full paper submission - April 16, 2022
- Acceptance notification - May 28, 2022
- Camera ready copy - June 11, 2022

Evaluation of papers is double-blind and based on full text, considering original scientific and technological contribution. However, prospective authors should also submit a short abstract to the conference in advance, in order to check if the proposed topic fits within the conference scope.

When submitting on the web site, you have to indicate the name of the special session. Submission procedure via EasyChair available on: <http://www.pro-ve.org>, with copy by email to the chairs of the special session.