



International

Innovation in Knowledge Based and Intelligent
Engineering Systems



INVITED SESSION SUMMARY

Title of Session:

The 3rd International Symposium on Intelligent and Resilient Systems for Industry 5.0

Name, Title and Affiliation of Chair:

Chairs

Dr. Olfa Belkahla DRISS, ESC University of Manouba, LARIA Laboratory, ENSI University of Manouba, Tunisia
Email: olfa.belkahla@esct.uma.tn

Prof. Ouajdi KORBAA, ISITCom University of Sousse, MARS Laboratory, ISITCom University of Sousse, Tunisia

Email: Ouajdi.Korbaa@mars.mu.tn

Dr. Housem Eddine NOURI, ISIG University of Kairouan, LARIA Laboratory, ENSI University of Manouba, Tunisia

Email: houssemeddine.nouri@gmail.com

Dr. Bilel MARZOUKI, ENSI University of Manouba, LARIA Laboratory, ENSI University of Manouba, Tunisia

Email: bilel.marzouki@ensi-uma.tn

Details of Session (including aim and scope):

As the industry evolves toward Industry 5.0, the integration of intelligent systems with human-centric, sustainable, and resilient principles has become increasingly critical. This special session provides a platform for researchers and industry experts to discuss the latest advancements in techniques such as metaheuristics, multiagent systems, and AI-driven optimization tailored for the next generation of manufacturing and supply chains. The session emphasizes innovative solutions that align with the transformation to Industry 5.0, addressing challenges in collaboration, adaptability, and sustainability in industrial systems.

Scopes :

- Multiagent systems for collaborative decision-making
- Advanced metaheuristics for adaptive and resilient manufacturing
- Human-centric AI in production systems
- Green and sustainable supply chain optimization
- Intelligent scheduling and timetabling under uncertainty
- Robust combinatorial optimization for smart factories
- AI-driven distributed problem solving in cyber-physical systems
- Integration of IoT and AI for flexible manufacturing
- Enhancing worker-technology collaboration through intelligent systems
- Addressing ethical and social challenges in Industry 5.0 frameworks

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

LARIA Laboratory, ENSI University of Manouba, Tunisia
MARS Laboratory, ISITCom University of Sousse, Tunisia
ESC University of Manouba, Tunisia
ISIG University of Kairouan, Tunisia

Email & Contact Details:

Dr. Olfa Belkahla DRISS, ESC University of Manouba, LARIA Laboratory, ENSI University of Manouba, Tunisia
Email: olfa.belkahla@esct.uma.tn

Prof. Ouajdi KORBAA, ISITCom University of Sousse, MARS Laboratory, ISITCom University of Sousse, Tunisia

Email: Ouajdi.Korbaa@mars.mu.tn

Dr. Housem Eddine NOURI, ISIG University of Kairouan, LARIA Laboratory, ENSI University of Manouba, Tunisia

Email: houssemeddine.nouri@gmail.com

Dr. Bilel MARZOUKI, ENSI University of Manouba, LARIA Laboratory, ENSI University of Manouba, Tunisia

Email: bilel.marzouki@ensi-uma.tn