SPECIAL SESSION (SS1.17)

"Industrial Applications: Theory and Practice"

Development, design and improvement of industrial processes and systems for the industry 4.0

The term "Industry 4.0" has invaded all conversations about the future of industrial production. Its main goal is to achieve the intelligent factory characterized by adaptability, resource efficiency, and ergonomics, as well as the integration of customers and business partners in business and value processes. To achieve this challenging objective companies must cope with the increasingly stricter requirements in terms of data collection and service flexibility while maintaining their production capacity.

Currently, industrial companies are pushed to think globally while acting and staying economically compatible with the local context. The same can happen inside the factory, where enterprise level strategy needs to be accompanied by local action at the resources and devices level. As an example, integrated systems for machining (e.g. CNC machines) are used worldwide, and organizational strategies need to be flexible to accommodate highly variable domains of application and consumer policy restrictions, configuring and allocating resources in-house depending of the product variant.

This session will emphasize the Research/Industry cooperation on the industry 4.0 paradigm, focusing in the presentation and analysis of both theory and industrial applications applying internet of things technology and aiming at improving industrial systems and processes.

Target Attendees:

- Academia and industry

Chair:

- Dr. Maria Marques (mcm@uninova.pt), UNINOVA - GRIS, Portugal

Co-Chair:

- Dr. Carlos Agostinho (ca@uninova.pt), UNINOVA – GRIS, Portugal