Digital Advances in Latin America in Asset Management Practices: Pilots and Case Studies

Invited Track Code: qmd79

This proposal is endorsed by TC5.1 Manufacturing Plant Control, TC5.3 Integration and Interoperability of Enterprise Systems and the AMEST working group.

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Latin American economy has mainly been an export-based economy. Due to its large areas of land that are rich in minerals and other raw materials, mining has traditionally been the main economic sector. However, the region is characterized with other sectors that are already significant in the worldwide landscape such as the food industry in Brazil, and the automotive manufacturing in Mexico, amongst others. Furthermore, other sectors have the potential to grow notably in the future. For instance, due to its vast geography and abundant natural resources, this region may become a major player in the field of renewable energy.

Adoption of new technologies in Latin America has traditionally been delayed with respect to other more industrialized regions. This phenomenon is also occurring with digital transformation technologies. For this reason, this session provides an excellent forum for scientists, researchers, engineers and industrial practitioners to meet and share successful case studies and lesson learnt from the application of digitalization technologies to the asset management in Latin America.

Since asset management include all the life cycle activities of physical assets, contributions concerning the digitalization of maintenance and operations are also welcome.

The specific topics of the session include, but not limited to,

- Industry 4.0 and Cyber Physical Systems
- Digitalization and Smart Retrofitting
- Big data and advanced analytics
- Artificial Intelligence and decision aid techniques
- Industrial Internet of Things, edge computing and blockchain
- Digital Twins for Assets Management
- Place of virtual reality in asset management
- Information, systems, control and interoperability
- Industrial Business model innovation
- Intelligent manufacturing systems and smart factory
- Logistics, supply chains and networks
• Asset Lifecycle Management
• Maintenance, quality, reliability, safety and dependability
• Integrated Maintenance and Production Systems
• Asset management and sustainability

**Time schedule**

October 31, 2022  Deadline for paper submission
February 21, 2023  Notification of acceptance/rejection
March 31, 2023  Final paper submission
09-14 July 2023  22nd IFAC World Congress: Yokohama, Japan

**Manuscript Preparation**

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