Special Session – Call for Papers

Novel approaches and tools for information management and exploitation in manufacturing

Session Organizers:

Prof. Oliver Riedel   Fraunhofer IAO, University of Stuttgart   oliver.riedel@iao.fraunhofer.de
Prof. Erwin Rauch   Free University of Bozen-Bolzano   erwin.rauch@unibz.it

Abstract:

The ongoing trend towards ever individual products results in an increase of complexity of products and the processes for their creation. The Digital Transformation leads to novel possibilities to cope with the related emerging challenges. Furthermore, the capture and storage of data at shop-floor level becomes easier, resulting in rising amounts and varieties of data and information, which on one hand have to be managed and processed ("Data Overload") but which can be exploited ("Data Abundance"), too. But technical advancements in information sciences like Artificial Intelligence and semantic technologies like knowledge graphs provide new means to cope with data as well as information and to leverage related possibilities.

Objective of this session is to discuss approaches and means to leverage novel methods and tools of information management for capturing, processing, storing and provision of information to support decision making in data-driven manufacturing in coping with the ongoing increase of information as well as complexity of products and processes.

Topics may include but are not limited to:

- Innovative approaches for data capture and management
- Knowledge-graphs in information management for manufacturing
- Self-organizing data management approaches
- Just-in-Time Information Retrieval and provision
- Data exploitation and decision-making support

Paper Submission: Draft papers reporting original work with up to 6 pages length in accordance with the IFAC format are welcome. When submitting your paper to https://ifac.papercept.net please use the session code for this special session.

Important Dates:

Paper submission deadline:	January 31st, 2024
Reviewing papers:	March 15th, 2024
Final papers submission deadline:	April 15th, 2024
Early registration deadline:	April 30th, 2024
Conference date:	August 28th – 30th, 2024
More information:	www.incom2024.org