

**Invited Session on “Maintenance-Free Factory: Concepts, Models and Innovative Approaches”
for IFAC MIM 2022**

Invited session identification code TBA
IFAC MIM 202, June 22-24, 2022, Nantes, France

<https://ifac.papercept.net/>

Session Chairs:

- Prof. Dr. Wilfried Sihn, TU Wien and Fraunhofer Austria, AUSTRIA
- Priv.-Doz. Dr.-Ing. Fazel Ansari, TU Wien and Fraunhofer Austria, AUSTRIA
- Dr. Robert Glawar, Fraunhofer Austria, AUSTRIA

For decades, different approaches have been persuaded to optimize maintenance management. Especially advancing digitalization is leading to novel data-driven maintenance methods and strategies. However, the value-added implementation of the novel solutions faces several challenges in the industrial context. Yet in many companies, maintenance is not considered as a strategic competitive factor. Rather maintenance is associated with negative prejudices and the term is mostly associated with cost drivers instead of a value-adding service. This session aims to foster revolutionary rethinking on maintenance management by introducing the vision of a “Maintenance-Free Factory” towards transformation of tomorrow's maintenance management system supported by human-centered, intelligent, and sustainable approaches and plausible industry-integrated solutions.

Session topics:

The Invited Session aims to collate the recent research results on how AI and digital technologies can be utilized and deployed to improve reliability, availability, maintainability, safety, security and sustainability (aka RAM3S) towards realizing the vision of “Maintenance-Free Factory”. We are looking at conceptual, modeling, empirical and case studies including business cases enriched by a practical context. In particular interests are the papers focusing on the application of smart maintenance in cyber physical production systems in the context of e.g. but not limited to automotive, mechanical engineering, electronics and semi-conductor manufacturing.

Submission

For author guidelines, please refer to www.ifac-control.org. All papers must be submitted electronically using <https://ifac.papercept.net/>. All papers must be prepared in a two-column format in accordance with the IFAC manuscript style. Please use the official IFAC instructions and template to prepare your contribution as full-length draft paper and submit it online by **February 15, 2022**. Submission details are available on the symposium website. All submissions must be written in English. All papers that conform to submission guidelines will be peer-reviewed by IPC members. The corresponding author submits the paper online (pdf format) as **an invited session paper**. Submission as an invited paper requires the **invited session code TBA**. Several international journals (IJPR, ANOR, FSM Journal, IJISM) are associated with the MIM 2022 for publication of special issues.

Important dates:

February 15, 2022	Deadline for the submission
March 15, 2022	Notification of acceptance/rejection
April 5, 2022	Deadline for the final submission