CALL FOR PAPERS

International Federation for Information Processing

APMS 2021

Nantes, France

IFIP International conference

Advances in Production Management Systems

Sun. September 5, 2021 - Thu. September 9, 2021

Online

"Artificial Intelligence for Sustainable and Resilient Production Systems"

Conference Chair:
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Doctoral Workshop Chair:
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CONFERENCE WEBSITE
http://www.apms-conference.org/

60th Anniversary of IJPR

OBJECTIVES AND SCOPES OF APMS 2021

APMS 2021 brings together leading international experts on production systems and logistics from academia, industry, and government to discuss pressing issues in smart manufacturing, operations management, supply chain management, and Industry 4.0 in the Artificial Intelligence era. The conference features several sessions to discuss original, high-impact academic contributions, which will be published in the **Springer** Series ACIT and indexed on *SCOPUS* and *Web of Science*. World-renown industry leaders will share their industrial viewpoints and insights through industry keynotes. The conference is sponsorized by the International Federation of Information Processing (IFIP), and it is organized by the IFIP Working Group 5.7 on Advances in Production Management Systems established in 1978. The conference is also supported by two leading journals: the International Journal of Production Research (IJPR) and Production Planning & Control (PPC).

CONFERENCE TOPICS

Topics of interest include, but are not limited to the following:

Artificial Intelligence & Data-driven Production Management

- Artificial Intelligence and Machine Learning
- Advanced Modelling, Simulation and Optimization Techniques
- Big Data Analytics
- Blockchain Technologies
- IIOT and Interoperability
- Data-driven Manufacturing and Services Operations Management
- Novel Production Planning & Control Approaches
- Supply Network Planning, Optimization and Finance
- Distribution Management

Digital Supply Networks

- Digital and Smart Supply Chain Management
- Intelligent Logistics Network Management
- Risk Analysis, Resilience and Disruption Management
- Strategies for Supply Network Digitalization
- Technology Implementation in Digital Supply Network
- Organization and Culture in Digital Supply Network
- Information Sharing in Platform Supply Chains
- Digital and Virtual Quality Management Systems
- Product-Service Systems

Smart Manufacturing & Industry 4.0

- Manufacturing System Engineering: Agile, Flexible and Reconfigurable
- 5G-enabled Manufacturing
- Connected, Smart Factories of the Future
- Cyber-Physical Cognitive Systems
- Cyber-Physical Production Systems and Digital Twins
- Mass Customization and Mass Individualization
- Cyber Security and Data Protection in Smart Industries
- Digital Assistance Systems: Augmented Reality and Virtual Reality
- Industrial, Collaborative, Mobile and Software Robots
- Intelligent Maintenance Systems
- Lean Manufacturing and Innovation

Sustainable Production Management

- Additive and Hybrid Manufacturing
- Sustainable Product Design and Engineering
- Green Manufacturing
- Remanufacturing and Disassembly Systems
- Socio-Cultural Aspects in Production Systems
- Circular Economy and Closed Loop Supply Chains

Cloud and Collaborative Technologies

- Emerging Digital Manufacturing Platforms
- Value Co-creation in Manufacturing and Service Systems
- Collaborative Design and Collaborative Engineering
- Cloud-Manufacturing

SPECIAL SESSIONS

Special sessions will be organised to have focused discussions on the cutting edge topics

Garetti Doctoral Workshop

Following the tradition of past APMS conferences, the Marco Garetti Doctoral Workshop provides Ph.D. students with the opportunity to present and discuss their doctoral research and receive feedback and exchange ideas in an inspiring academic community of fellow Ph.D. students, experienced researchers and professors of the IFIP WG 5.7 community. The interested Ph.D. students are expected to submit a proposal up to 15 pages in length using the provided template.

IMPORTANT DATES

Special session proposal :
February 21, 2021

Submission of full papers :
March 21, 2021

Notification of
review results (round 1) :
April 30, 2021

Submission of revised papers :
June 4, 2021

Notification of review results (final) :
June 18, 2021

Submission of camera-ready papers :
July 2 2021

Submission of
Ph.D. research proposals :
July 9, 2021

Conference dates :
September 5 - 9, 2021

SUBMISSIONS

Authors are invited to submit papers (up to 8 pages) using the author guidelines provided by Springer. The conference proceedings will be published by Springer as Proceedings in IFIP Advances in Information and Communication Technology (AICT). Volumes published as part of the IFIP AICT are made available through multiple indexing services including Clarivate Analytics' Web of Science and Scopus.

The conference will coincide with the celebration of the **60th anniversary of the International Journal of Production Research** (IJPR). Established in 1961, IJPR is a leading journal in the areas of manufacturing, industrial engineering, operations research and management science. For this occasion, a number of specific events and sessions will be organized, a large number of authors of APMS 2021 will be invited after the conference to submit extended versions of their papers to IJPR or PPC as well as some special issues of other well-known international journals will be prepared. Moreover, several awards (e.g. Best papers, Best student papers, Best industrial applications ...) will be programmed as a gesture to recognize authors outstanding scientific contributions and works in their respective areas. The selection will be based on the paper ingenuity, importance, and highlights some of the theoretical and practical innovations that are likely to shape the future of production systems and logistics.

REGISTRATION

The registration for virtual conference includes admission to all online sessions and the conference proceedings.

Early-bird registration (before or on July 15, 2021)

Regular €350
Student/retired €200

Late registration (after July 15, 2021)

Regular €450
Student/retired €300

Depending on the Covid situation, if it will be possible to physically attend the conference, a supplemental fee of 350€ will be requested.

HOST ORGANISATION

APMS 2021 is hosted by IMT Atlantique, a French engineering school (Grande Ecole, a sort of Ivy League School), one of the leading French institutions of higher education and research in this field. It is ranked among the top 400 universities in the world in THE World University Ranking 2020, present in four themes of the Shanghai ranking, and is in top 25 in U-Multirank on the number of joint publications with industrial partners. The School is a part of the National Institute of Science and Technology IMT. Its cutting-edge research carried out in joint research units with CNRS, Inria, INSERM, Ecole centrale de Nantes, University of Nantes, etc. The Department of Automation, Production and Computer Sciences (DAPI) is located on the Nantes Campus of IMT Atlantique. The department employs around one hundred people, forty of which are Faculty Members. The research topics of DAPI include Control, Robotics, Operations Research, Industrial Engineering, Artificial intelligence, and Software Engineering. The Faculty members and PhD student of DAPI are members of the LS2N CNRS research laboratory (http://ls2n.fr/).