

# APMS 2022

IFIP International Conference  
ADVANCES IN PRODUCTION MANAGEMENT SYSTEMS

## Smart Manufacturing and Logistics Systems: *Turning Ideas into Action*

“Digital, Autonomous, Sustainable, and Interoperable Systems”

September 25 - 29, 2022, Gyeongju, Korea  
Online/Offline Hybrid



### Honorary Co-Chairs:

Dimitris Kiritsis, EPFL, Switzerland  
Chi-Hyuck Jun, POSTECH, Korea

### Conference Chair:

Duck Young Kim, POSTECH, Korea

### Conference Co-Chair:

Gregor Von Cieminski, ZF Friedrichshafen,  
Germany

### Program Chair:

Kangbok Lee, POSTECH, Korea

### Program Co-Chair:

David Romero, Tecnológico de Monterrey,  
Mexico

### Program Committee:

Dong Ho Lee, Hanyang Univ., Korea  
Sang Do Noh, Sungkyunkwan Univ., Korea  
Kyungsik Lee, Seoul National Univ., Korea  
Hong-Bae Jun, Hongik Univ., Korea  
Xuehao Feng, Zhejiang Univ., China  
Thorsten Wuest, West Virginia Univ., U.S.A  
Mélanie Despeisse, Chalmers Univ. of  
Technology, Sweden

### Advisory Board:

Alexandre Dolgui, IMT Atlantique, France  
Bojan Lalić, Univ. of Novi Sad, Serbia  
Farhad Ameri, Texas State Univ., USA  
Ilkyeong Moon, Seoul National Univ., Korea  
Hermann Lödding, TUHH, Germany  
Marco Taisch, Polimi, Italy  
Andrew Kusiak, Univ. of Iowa, USA  
Volker Stich, RWTH Aachen, Germany  
Vittal Prabhu, Penn State, USA  
Jai-Hyun Byun, Gyeongsang National Univ.,  
Korea

### OBJECTIVES AND SCOPES OF APMS 2022

APMS 2022 aims to bridge the gap between academia and industry in the development of next-generation manufacturing and logistics systems. The conference features special sessions to empathize with the real challenges of today's industry, and accordingly, to exchange valuable knowledge and discuss about new way outs, while emphasizing how to turn technological advances into business solutions. The conference spotlights internationally renowned keynote speakers from academia and industry and the active participations of manufacturers and their suppliers as well as service providers. Therefore, practitioners from industry, researchers and lecturers are cordially encouraged to register and participate in this trendy conference. The presented papers will be published in the Springer Series ACIT and indexed on SCOPUS and Web of Science.

The APMS conference is sponsored 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: Production Planning & Control (PPC) and the International Journal of Production Research (IJPR).

### CONFERENCE TOPICS

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

#### AI & Data-driven Production Management

- Advanced Production Planning & Control
- Data-driven Manufacturing & Service Operations Management
- Prognostics & Assets Health Management
- AI/ML in Manufacturing

#### Simulation & Model-driven Production Management

- Optimization & Operations Management
- Advanced Modelling & Simulation Techniques
- Simulation of Large-Scale Production & Supply Chain Systems

#### Industrial Digital Transformation

- Digital Transformation Strategies
- Business Process Models
- Organizational & Cultural Aspects for Digital Transformation

#### Digital Supply Networks

- Global Supply Chains
- Logistics & Distribution Networks
- Supply Network Planning, Optimization & Finance

#### Smart Manufacturing & Industry 4.0

- Autonomous & Interoperable Systems
- Smart Factory
- Digital Twin & Metaverse on Manufacturing
- Cloud and Collaborative Technologies
- Operators 4.0

#### Service Systems Design, Engineering & Management

- Industrial Product-Service Systems
- Digital Servitization
- Smart Services

#### Sustainable Production Management

- Eco-Design & Green Manufacturing
- Circular Economy & Closed Loop Lifecycle Management
- Lifecycle Assessment
- Human in the Systems
- Serious Games for Training

#### Special Sessions

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

#### Marco Garetti's Doctoral Workshop

Following the tradition of past APMS conferences, the Marco Garetti's 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 research proposal up to 15 pages in length using the provided template.

[info@apms-conference.org](mailto:info@apms-conference.org)

### CONFERENCE WEBSITE

<http://www.apms-conference.org/>



## IMPORTANT DATES

- ✓ Special session proposal: **February 28, March 11, 2022**
- ✓ Submission of full papers: **April 15, April 30, 2022**
  - Notification of final review results: **July 8, 2022**
  - Submission of camera-ready papers: **July 15, 2022**
- ✓ Submission of PAIP abstracts: **July 15, 2022**
- ✓ Submission of Ph.D. research proposal: **July 31, 2022**

## SUBMISSION & REGISTRATION

<http://www.apms-conference.org/>

### Hosts



APMS 2022 is hosted by the Department of Industrial & Management Engineering of POSTECH (Pohang University of Science & Technology) and KII (Korean Institute of Industrial Engineers). POSTECH opened its doors in 1986 as the first research-oriented university in Korea to educate the brightest minds in the country and lead the transition of Korea's higher education from dissemination to creation of knowledge. It is ranked 3rd in the THE world's best small universities rankings (2021), 28th in the THE world university rankings (2010), 1st in the JoongAng Ilbo Korean university rankings for ten consecutive years (1995~2015).



The Korean Institute of Industrial Engineers (KII) is a professional association of industrial and management engineers in South Korea.

Founded in 1974 as an engineering society focused on the core academic fields that improve the efficiency of an organization or system, KII has played leading roles in the development of Korean industry.



Institute for Industrial Systems Innovation, Seoul National University

#### Organizing Committee Chair:

Minseok Song, POSTECH, Korea

#### Organizing Committee:

Dong Gu Choi, POSTECH, Korea

Kwangmin Jung, POSTECH, Korea

Kwangyeol Ryu, Pusan National Univ., Korea

Jongho Shin, Chosun Univ., Korea

Sujeong Baek, Hanbat National Univ., Korea

### Presentation Only Sessions

APMS 2022 organizes **special sessions for practical applications and industrial participation** (called **PAIP** session). For the active participation of industrialists or academics presenting projects carried out with industry, an **extended abstract** is only required (one page in length). The submitted abstracts will be handled separately from the regular contributions and compiled in separate proceedings with their own ISBN in the form of a booklet. Furthermore, a **special registration fee** will be offered for those who wish to attend **one day of the conference for presentation**

### Registration

The registration for offline participation includes the conference proceedings, industry tour, welcome reception, gala dinner, and lunches, whereas the registration for online participation includes admission to all online sessions and the conference proceedings. The registration for "PAIP One Day" includes the conference proceedings and lunch.

	Early-bird registration (before or on 07/15/2022)	Late or on-site registration (after 07/15/2022)
<b>Offline</b>	Regular €600 Student/retired €400 Guest €200 (gala dinner included)	Regular €700 Student/retired €500 Guest €250 (gala dinner included)
<b>Online</b>	Regular €350 Student/retired €200	Regular €450 Student/retired €300
<b>PAIP One Day</b>	€200	€250

### Venue

APMS 2022 will be held in Gyeongju, Korea, a UNESCO-designated city, that was the capital of the ancient kingdom of Silla (57 BC – 935 AD). Gyeongju embraces Buddhism, science, and vibrant ancient culture that blossomed by the artistry of the Silla people. With a thousand years of the evergreen spirit of Silla, Gyeongju is truly a museum without a roof.



**Conference Place:** Lahan Select Gyeongju Hotel

338, Bomun-ro, Gyeongju-si, Gyeongsangbuk-do, Republic of Korea

<https://www.lahanhotels.com/en/gyeongju/index.do>

Published by

