

Editors

**Klodian Dhoska,
Evjola Spaho**

**Proceedings of Selected
Papers from the 1st
International Conference
on Industrial and
Systems Engineering
(ICISE 2026)**

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Preface

Welcome to the proceedings volume of selected papers from the 1st International Conference on Industrial & Systems Engineering (ICISE 2026) held on April 16–17, 2026, in Tirana, Albania. It is our great pleasure to present this Book, which brings together innovative research, original studies, and insightful analyses reflecting the dedication and scholarly rigor of our contributors. ICISE 2026 aims to bridge theory and practice, with a strong emphasis on sustainability, digital transformation, and systems thinking. The conference serves as a platform for both established experts and emerging researchers from around the world, fostering the exchange of knowledge and diverse perspectives across the fields of industrial and systems engineering. Organized by the Albanian Mechanical Engineering Association, the conference transcends geographical and disciplinary boundaries, creating a global forum for dialogue on the challenges and opportunities shaping modern industry and society. As issues related to development, employment, education, research, and business become increasingly interconnected, the conference provides an opportunity to share experiences and insights from a wide range of institutional and national contexts.

The nine selected papers included in this volume represent the forefront of research and development, highlighting recent advancements and future directions in industrial and systems engineering, as well as the broader digital economy. They were carefully selected from the 61 papers accepted for publication at ICISE 2026, which had an overall acceptance rate of approximately 41%, reflecting the high quality of the conference contributions. Of these, 52 papers are published in the Springer conference proceedings, while nine selected papers are included in this volume of the TULTECH Book Series, collectively reflecting the breadth and quality of the research presented at the conference.

We are honored to host such a distinguished community of scholars and practitioners. The diversity and depth of the contributions demonstrate the dynamic and interdisciplinary nature of the field, and we are confident that the ideas presented here will inspire further research, innovation, and collaboration.

We extend our sincere gratitude to all authors for their valuable contributions, to the reviewers for their careful and constructive evaluations, and to the organizing committee for their dedication and hard work in making this conference possible. We also warmly acknowledge participants from Albania, Poland, Greece, Iraq, Uganda, India, Kosovo, North Macedonia, Somalia, Russia, Austria, Serbia, the United Kingdom, Italy, Spain, Bulgaria, Azerbaijan, Latvia, Estonia, Indonesia, Morocco, Kazakhstan, the Czech Republic, and Germany.

We hope that this Book will provide valuable insights and inspiration, and that it will contribute to advancing knowledge and practice in the field.

Thank you for being part of ICISE 2026. We look forward to the continued exchange of ideas and the collaborations that will emerge from this event.

August 2026

Klodian Dhoska and Evjola Spaho

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Their commitment and collaboration played an essential role in facilitating the event, enabling meaningful scholarly exchange among participants, and enhancing the overall quality of the conference proceedings. The editors deeply appreciate their contributions and continued engagement.



Keynote Speakers

1. **Prof. Dr. Panagiotis Kyratsis**, Department of Product and Systems Design Engineering, University of Western Macedonia, Greece
Topic: CAD-based Programming for Product Design and Manufacturing
2. **Prof. Ir. Agus Pramono**, S.T., M.T., Ph.D. Tech, Department of Metallurgical Engineering, Universitas Sultan Ageng Tirtayasa (UNTIRTA), Indonesia.
Topic: Materials Engineering Meets Biomedical Innovation: Hydroxyapatite Composites from Bovine & Porcine Bone Waste for Implant Applications
3. **Arch. Yitzhak-Balfour Samoun**, Senior Associate at Zaha Hadid Architects, UK
Topic: Design Intelligence for Smart Cities
4. **Assoc. Prof. Dr. Valma Prifti**, Polytechnic University of Tirana, Albania
Topic: The Role of Cloud Computing in Enhancing Production Systems, Logistics, and Supply Chain Processes
5. **Assoc. Prof. Dr. Maad M. Mijwil**, Digital Economy Department, Al-Iraqia University, Iraq
Topic: Integrating AI into Lean Manufacturing & Process Optimization
6. **Prof. Dr. Muhamed Krasniqi**, Traffic and Transport Engineering, Tempulli College, Kosovo.
Topic: ROAD Safety as a Systemic Component of Sustainable Development: A Ten-year Review of Policy, Data and Institutional Change in Kosovo (2015-2025) within the Western Balkans Context

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