

PREFACE

It is our great pleasure to present this Special Issue of the Tehnički glasnik-Technical Journal, which marks the latest chapter in the fruitful collaboration between the Faculty of Mechanical Engineering and Naval Architecture, CAPLM, and the Tehnički glasnik-Technical Journal, a partnership that has continued since 2020. This issue is the third in a series of Special Issues dedicated to the International Scientific Conference "Management of Technology – Step to Sustainable Production" (MOTSP), which has been organized annually since 2009.

The 16th MOTSP Conference takes place from June 3 to June 6, 2025, at the Hotel Miramare in Crikvenica, Croatia. This year's Special Issue features 29 rigorously reviewed papers authored by researchers from eight countries: Austria, Germany, Hungary, Poland, Slovenia, Slovakia, Serbia, and Croatia. The breadth and diversity of these contributions reflect the international character and scientific excellence fostered by the MOTSP community. Additional accepted papers will be published in forthcoming regular issues of the Tehnički glasnik-Technical Journal.

The MOTSP2025 conference featured three invited lectures from leading experts:

- Filip Šuligoj, "Advancements in Robotically Assisted Medical Procedures"
- Sven Maričić, "Application of Artificial Intelligence in Additive Technologies: Case Studies in Robotics and Medicine"
- Tomislav Staroveški, "Innovations in Robotic Sanding and Polishing Systems"

The presented works, delivered through oral presentations and posters, span a wide array of contemporary topics, including but not limited to: digital manufacturing, robotics, artificial intelligence, sustainable production, materials engineering, industrial engineering, industry 4.0/5.0 and industrial process optimization. The papers are organized into thematic sections to facilitate focused discussion and knowledge exchange.

Beyond the scientific content, this issue underscores the MOTSP conference's role as a platform for fostering international collaboration and professional networking. The conference has repeatedly proven to be a catalyst for new partnerships and interdisciplinary research, as exemplified by the ongoing collaboration between researchers from Croatia and India, initiated at MOTSP2024 in Dubrovnik.

We extend our sincere gratitude to all authors, reviewers, and members of the organizing and editorial committees whose dedication and expertise have made this Special Issue possible. We are confident that the contributions collected here will stimulate further research, innovation, and collaboration within the engineering and technology community.

We wish all readers an inspiring and productive engagement with the work presented in this Special Issue.

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