Preface

This issue focuses on contributions that detail new developments and enhance the understanding of incremental and sheet material forming processes. The topics of interest include (but are not limited to) novel process designs, in-process measurement techniques, innovative tooling, methods for the analysis and modelling of friction phenomena and methods for the optimization, robust design and control of incremental and sheet forming processes. It is expected to address the following topics related to incremental forming and sheet material forming:

- Development of novel incremental forming strategies
- Hybrid processes combining sheet forming with additive or subtractive manufacturing
- Advanced forming techniques for lightweight alloys, composites, and high-strength steels
- Flexible forming systems for customized or low-volume production
- Adaptive, modular, and reconfigurable tooling for flexible forming
- Design and materials for forming tools to improve life and surface finish
- Multi-axis machine kinematics and robotic forming platforms
- Cooling, lubrication, and surface engineering for tooling performance
- Finite element models for incremental and sheet forming processes
- Multi-physics simulations including thermo-mechanical and tribological effects
- Use of AI/ML in predictive modeling and defect detection
- Digital twins and virtual commissioning of forming lines
- Multi-objective optimization for formability, accuracy, and cost
- Statistical and machine learning approaches for robust process design
- Real-time feedback control and adaptive process adjustment

Editors

Giuseppina Ambrogio	University of Calabria
Mihaela Banu	University of Michigan

Co-editors

Joost Duflou	Katholieke University of Leuven
Carpoforo Vallelano	Universidad de Sevilla
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