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# Advances in the Control of Complex Dynamic Systems

Guest Editor:

#### Dr. Gorazd Karer

Laboratory of Control Systems and Cybernetics, Faculty of Electrical Engineering, University of Ljubljana, 1000 Ljubljana, Slovenia

Deadline for manuscript submissions: **5 January 2025** 

### Message from the Guest Editor

This Special Issue addresses ongoing research and development in the field of control systems engineering, focusing on the modeling, identification, and control of systems with complex dynamics, distinct nonlinearities, and interacting components. Techniques used in this area include model-based control, adaptive control, optimal control, and robust control. The goal is to develop control systems that can effectively manage the complexity and uncertainty inherent in these systems, resulting in improved performance and stability.

Model predictive control is a family of control methods in which a model of the system is used to predict the future behavior of the system given certain inputs. The optimal inputs that are finally applied to the real system are usually determined by various optimization techniques. Various intelligent methods and algorithms can be implemented to improve the stability and performance of the closed loop system.

Topics of interest include but are not limited to:

- Complex process modeling;
- Identification;
- Fuzzy systems;
- Hybrid systems;
- Evolving systems;
- Interval systems;
- Model predictive control;





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#### Prof. Dr. Giancarlo Cravotto

Department of Drug Science and Technology, University of Turin, Via P. Giuria 9, 10125 Turin, Italy

### Message from the Editor-in-Chief

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