# Special Issue

# Advanced Control Theory in Robot System

### Message from the Guest Editor

The theory of feedback control is based on mathematics and widely used in different branches of engineering. Closed-loop controllers are fundamental for the proper operation and control of robotic and mechatronic systems. For this reason, the focus of this Special Issue is to show and disseminate the relevant design and application of different control techniques in robotics. The control theory provides a systematic approach to design stable controllers, which avoid strong oscillations, accurately achieve their objectives, and have fast responses stabilizing around a final steadystate value. This Special Issue presents different works on the theory of control and its application in robotics and other related areas. These areas include, but are not limited to, new insights in mathematical models. sensing, perception, and the control of complex systems and robots, and IA applications of control theory. We are seeking high-quality and innovative research and review papers that cover these topics.

### **Guest Editor**

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## Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

### Editor-in-Chief

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