



## New Insights in Multi-Agent Systems Cooperation, Control and Optimisation

Guest Editors:

**Dr. Marco Pérez-Hernández**

**Dr. Manuel Herrera**

**Dr. Rakib Abdur**

**Dr. Jun Hong**

Deadline for manuscript  
submissions:  
**closed (20 March 2023)**

### Message from the Guest Editors

The aim of this Special Issue is to attract novel, high-quality contributions on the theory, modelling, engineering, and applications of the social processes of multi-agent systems. This includes contributions studying challenges related to collective control, collective decision-making and optimisation, collective and social machine learning, multi-agent reinforcement learning, as well as the coordination, cooperation, and evolution of agents, etc. We invite manuscripts covering the representation, modelling, and simulation of structural, dynamic, social, and network-related aspects of complex natural and artificial multi-agent systems. We also seek papers addressing the design, validation, verification, deployment, and explainability of the social methods, mechanisms, architectures, techniques, and algorithms for the engineering of multi-agent systems. The problems and solutions presented may be inspired by multiple disciplines and may have applications in any area, for example, healthcare, climate studies, smart cities, critical infrastructures, industry 4.0, internet of things, multi-robot teams, or digital twins.





an Open Access Journal by MDPI

## Editor-in-Chief

**Prof. Dr. Giulio Nicola Cerullo**  
Dipartimento di Fisica,  
Politecnico di Milano, Piazza L.  
da Vinci 32, 20133 Milano, Italy

## Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

## Author Benefits

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), Ei Compendex, Inspec, Embase, CAPlus / SciFinder, and other databases.

**Journal Rank:** JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)

## Contact Us

---

*Applied Sciences* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/applsci](http://mdpi.com/journal/applsci)  
[applsci@mdpi.com](mailto:applsci@mdpi.com)  
[X@Applsci](https://twitter.com/Applsci)