



## **Advances in Systems Engineering Interoperability: Engineering Design and Operation**

Guest Editors:

**Dr. José María Álvarez Rodríguez**

Department of Computer Science and Engineering, Carlos III University of Madrid, 28903 Madrid, Spain

**Dr. Javier García-Heras Carretero**

Department of Bioengineering and Aerospace Engineering, Universidad Carlos III, Av. de la Universidad 30, 28911 Leganés, Madrid, Spain

Deadline for manuscript submissions:

**closed (30 November 2022)**

### **Message from the Guest Editors**

The development and operation of software-intensive complex systems is becoming more challenging than ever. The implicit need for the continuous delivery of new products and services in a timely and cost-effective manner is a cornerstone for the realization of Industry 4.0. In this context, interoperability emerges as a key enabler to build collaborative engineering environments in which people, processes, methods, and tools are perfectly synchronized to build complex systems. The need of communicating and exchanging data, information, and knowledge between organizations, tools, and people is also increasing. To enable this, it is necessary to establish new mechanisms that can support engineers to easily represent and organize domain knowledge, integrate and exchange data, expose and consume functionalities, and manage the engineering process under a standardized and interoperable environment.

This Special Issue aims to bring together research works and real-world use cases, scenarios, and approaches focused on the improvement of the software and systems engineering process through interoperable mechanisms applied to the design and operation of software-intensive systems.





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, CAPlus / SciFinder, and other databases.

**Journal Rank:** JCR - Q1 (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)