



## New Solutions for Robotic Swarms in Sea Operations

Guest Editors:

**Prof. Dr. José-Fernán  
Martínez-Ortega**

Department of Telematics and  
Electronic Engineering, ETSIS de  
Telecomunicación, Universidad  
Politécnica de Madrid, Madrid,  
Spain

**Dr. Pedro Castillejo Parrilla**

Departamento de Ingeniería  
Telemática y Electrónica (DTE),  
Universidad Politécnica de  
Madrid (UPM), 28031 Madrid,  
Spain

Deadline for manuscript  
submissions:

**closed (30 November 2019)**

### Message from the Guest Editors

Dear Colleagues,

Today, a significant number of offshore operations include intervention of divers in hazardous environments, representing an overdependence for the development of the maritime industry. Unmanned underwater vehicles could represent a solution, but they are tailor-made for specific task and difficult to operate.

To expand the use of autonomous underwater vehicles (AUVs), autonomous surface vehicles (ASVs), remotely operated underwater vehicles (ROVs) or unmanned aerial vehicles (UAVs) to facilitate the creation, planning and execution of maritime and offshore operations by having a swarms of those vehicles cooperating each other in an intelligent way. This will reduce the operational cost, increase the safety of tasks and contribute to expand the offshore sector. This approach comes with many technological challenges that are yet to be solved.

This Special Issue focuses on novel and innovative solutions for swarms cooperative robot systems in underwater environments. To this purpose, high-quality contributions from both academia and industry are welcome.

Prof. Dr. José-Fernán Martínez

Dr. Pedro Castillejo Parrilla

*Guest Editors*





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), 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](#)