



## Application of Semiochemicals and Molecular Signals in Pest Management

Guest Editors:

**Prof. Dr. Pengfei Lu**

**Dr. Lilin Zhao**

**Dr. Hai-Li Qiao**

Deadline for manuscript  
submissions:

**closed (30 December 2022)**

### Message from the Guest Editors

Dear Colleagues,

There has been a continual increase in the number of pests or harmful biology that represent problems in agricultural and forestry ecology systems.

The study of semiochemicals and molecular signals will allow for corresponding management and protection strategies. Studies regarding molecular signals will lay a foundation for the rapid advancement of gene control in the future.

We welcome novel research, reviews, and opinion pieces covering all related topics, including (1) chemical communication behavior in pests to agricultural and forestry systems or harmful biology; (2) the identification and characterization of semiochemicals derived from pests or harmful biology themselves (pheromones) and host plants, natural enemies, symbiotic fungi, bacteria volatiles, parasitic nematodes, rats, rabbits and destructive plants (allelochemicals) under laboratory conditions; (3) the field application of these semiochemicals; (4) molecular signal transmission mechanisms and screening; the characteristic and function verification of candidate genes or proteins with harmful biology in agricultural and forestry ecology 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), 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](#)