Special Issue

Characterization of Environmental Microbial Communities

Message from the Guest Editors

The majority of natural bacteria was not cultivated and investigated up to now and there is nearly no knowledge about the extinction of microbial specials in nature. There is a serious lack of knowledge about the number of unknown microbial species and about their physiological and ecological importance. This situation can be improved by the development of new methods of cultivation, testing and characterization of microorganisms and their interactions using microfluidics. On the one hand, microfluidics is a valuable tool to mimic the local and partial decoupling of micro biotopes. On the other hand, it allows one to conduct high numbers of cultivation and experiments in parallel and to realize efficient screenings with large numbers of test organisms and test conditions. The Special Issue, announced here, is devoted to all questions related to the cultivation of microorganisms under microfluidic conditions and to using small cultivation volumes for studying natural microorganisms and microbial communities.

- microfluidics
- micro droplets
- micro-segmented flow
- microorganism screening
- environmental monitoring

Guest Editors

Prof. Dr. Johann Michael Köhler

Dr. Cleofe Palocci

Dr. Jialan Cao

Deadline for manuscript submissions

closed (30 April 2022)

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/si/75033

Applied Sciences
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
applsci@mdpi.com

mdpi.com/journal/applsci

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/journal/applsci

MDPI

About the Journal

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.

Editor-in-Chief

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

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 - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)