

# Special Issue

## Microbial Films—the Interplay of Physics and Biology

### Message from the Guest Editor

Authors are invited to submit their experimental modelling/simulation and theoretical work focused on the physics of biofilms and its interaction with biological aspects, such as: (i) biofilm mechanical properties and their relation to microbial attachment, growth and matrix maturation; (ii) effects of the physics of the environment on biofilm development (interactions with suspended particles, impact of air/gas-liquid flows, hydrodynamic patterns/shear stress, temperature, etc.); (iii) experimental methodologies to assess/interpret biofilm behaviour based on the measurement of physical parameters (rheology, porosity, density, tortuosity, ...); (iv) physical methods for online monitoring of biofilm development at lab and industrial scale, diffusion-mass transfer around and inside biofilms; (v) nanostructured surfaces/topographies and microbial adhesion. Other topics are welcome provided they keep the focus on physical approaches and their impact on biofilm metabolism, structure and spatial distribution of biofilm components.

### Guest Editor

Prof. Dr. Luis F. Melo

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### Deadline for manuscript submissions

closed (31 January 2022)



## Microorganisms

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## About the Journal

### Message from the Editor-in-Chief

"Microorganism" merges the idea of the very small with the idea of the evolving reproducing organism is a unifying principle for the discipline of microbiology. Our journal recognizes the broadly diverse yet connected nature of microorganisms and provides an advanced publishing forum for original articles from scientists involved in high-quality basic and applied research on any prokaryotic or eukaryotic microorganism, and for research on the ecology, genomics and evolution of microbial communities as well as that exploring cultured microorganisms in the laboratory.

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### Editor-in-Chief

Dr. Nico Jehmlich

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#### Journal Rank:

JCR - Q2 (Microbiology) / CiteScore - Q1 (Microbiology (medical))

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manuscripts are peer-reviewed and a first decision is provided to authors approximately 15.2 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the first half of 2025).