International Journal of
Molecular Sciences

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Polymeric Systems as Antimicrobial or Antifouling Agents

Guest Editors:

Dr. Antonella Piozzi
Department of Chemistry, Sapienza University of Rome, P. le A. Moro 5, 00185 Rome, Italy

Dr. Iolanda Francolini
Department of Chemistry, Sapienza University of Rome, P. le A. Moro 5, 00185 Rome, Italy

Deadline for manuscript submissions:
closed (30 June 2019)

Message from the Guest Editors

Antimicrobial polymers can help to prevent biofilm development and solve the problems associated with the use of conventional antimicrobial agents, such as residual toxicity, short term antimicrobial activity and development of resistant microorganisms. The microbial adhesion is a problem particularly felt in the field of medical devices since it can lead to serious infections and device failure. Different types of polymer systems have been designed to prevent microbial adhesion among which the most investigated are: (a) antifouling polymers; (b) amphiphilic polymers mimicking antibacterial peptides occurring in nature; (c) functionalized polymers able to load and release bioactive molecules such as antibiotics, heavy metals and other antiseptic agents. We particularly take an interest in manuscripts that report relevance of antimicrobial polymers in the design and fabrication of medical devices, packaging materials and water purification systems.

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Editor-in-Chief

Prof. Dr. José L. Quiles
Department of Physiology, Institute of Nutrition and Food Technology "Jose Mataix", Biomedical Research Center, University of Granada, Avda. Conocimiento s/n, 18100 Armilla, Granada, Spain

Message from the Editor-in-Chief

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Journal Rank: JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Organic Chemistry)

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International Journal of Molecular Sciences Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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