



Polymeric Systems as Antimicrobial or Antifouling Agents

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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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Message from the Editor-in-Chief

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