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Advanced Dendritic and Hyperbranched Polymers

Guest Editors:

Dr. Karol Ciepluch

Division of Medical Biology, Jan Kochanowski Universityin Kielce, 25-369 Kielce, Poland

Dr. Javier Sánchez-Nieves

Department of Organic Chemistry and Inorganic Chemistry, University of Alcala, 28805 Alcalá de Henares, Spain

Deadline for manuscript submissions:

closed (31 October 2021)

Message from the Guest Editors

Antibacterial resistance has become a global threat; of particular importance are multidrug-resistant (MDR) bacteria, with a broad spectrum of virulence factors. Multidrug resistance is overrepresented in Gram-negative bacteria, where the outer and inner membranes are effective barriers against most antibacterial agents. Most solutions are currently focused on finding the best permeabilizer of the bacterial membrane as the main mechanism of action to kill bacteria. Recent studies have shown the great potential of dendritic polymers, which may represent a new class of bacterial membrane permeabilizers. In this regard, the mechanisms of permeabilization of the outer bacterial membrane due to dendritic and hyperbranched polymers have now become of significant interest. We believe that knowledge of how dendritic polymers disrupt the bacterial membrane to carry out antibacterial activities is crucial in order to further develop potent and effective antibacterial agents.

For this Special Issue, we invite submissions in the form of manuscripts focusing on dendritic and hyperbranched polymers that could be applied in biomedicine as new bacterial membrane permeabilizer agents.













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Editor-in-Chief

Prof. Dr. Alexander Böker

Lehrstuhl für Polymermaterialien und Polymertechnologie, University of Potsdam, 14476 Potsdam-Golm, Germany

Message from the Editor-in-Chief

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