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Oligonucleotides Application to Nano- and Biotechnology (DNA Origami, DNA Machine)

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Message from the Guest Editors

Dear Colleagues,

Progress in organic synthesis, molecular biology, and nanotechnology has made nucleic acids leading elements numerous applications. For instance. oligonucleotides are the fundamental building elements for the construction of DNA origamis, nanodevices, and nanomachines. Oligonucleotides are also essential in the development of the antisense therapy strategy and other silencing methods. Conjugation gene oligonucleotides to other biopolymers and/or chemical entities, such as cell penetrating peptides or metal complexes is a highly developing field of research. Lastly, the advent of SELEX has made aptamers and DNAzymes popular tools for biosensing and therapeutic applications and the inclusion of modified triphosphates broadens the scope of these functional nucleic acids. Therefore, in this Special Issue on oligonucleotides, we welcome research articles and comprehensive reviews in all mentioned areas.

Prof. Dr. Shigeki Sasaki Dr. Marcel Hollenstein Guest Editors













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Message from the Editor-in-Chief

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