# **Special Issue**

### Modified Oligonucleotides: Design, Synthesis and Application

### Message from the Guest Editor

Oligonucleotides, which by virtue of their intrinsic ability to recognize specific sequences of intracellular nucleic acids, primarily RNAs, through complementary basepairing, are able to modulate their biological functions, have become an indispensable tool not only in molecular biology research but also in modern medicine as precision instruments for molecular diagnostics and therapy. As natural oligonucleotides are susceptible to enzymatic digestion when introduced into a living organism, the need for their stabilization through chemical modification is understood very early in their history. This Special Issue is aimed at providing a snapshot of contemporary modified oligonucleotide synthesis and applications, commemorating the 40th anniversary of the seminal paper by Beaucage and Caruthers that heralded the advent of the phosphoramidite chemistry (Tet. Let. 1981, 22, 1859-1862, doi:10.1016/S0040-4039(01)90461-7).

### Guest Editor

#### Dr. Dmitry A. Stetsenko

1. Head of the lab, Department of Physics, Novosibirsk State University 2. Lead Researcher, Institute of Cytology and Genetics, Siberian Branch of the Russian Academy of Sciences

### Deadline for manuscript submissions

closed (30 April 2022)



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Molecules Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 molecules@mdpi.com

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### Message from the Editor-in-Chief

As the premier open access journal dedicated to experimental organic chemistry, and now in its 25th year of publication, the papers published in *Molecules* span from classical synthetic methodology to natural product isolation and characterization, as well as physicochemical studies and the applications of these molecules as pharmaceuticals, catalysts and novel materials. Pushing the boundaries of the discipline, we invite papers on multidisciplinary topics bridging biochemistry, biophysics and materials science, as well as timely reviews and topical issues on cutting edge fields in all these areas.

### Editor-in-Chief

Prof. Dr. Thomas J. Schmidt

Institute of Pharmaceutical Biology and Phytochemistry, University of Münster, Corrensstrasse 48, D-48149 Münster, Germany

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