

## Special Issue

# Aptamers: Functional and Structural Studies

### Message from the Guest Editor

Aptamers are short fragments of nucleic acids that form specific, unique, and stable structures that bind target molecules with high affinity and selectivity. They are often named chemical antibodies, but in contrast to antibodies, they are characterized by the ease of their synthesis and storage, low production costs and minor batch-to-batch variability, negligible immunogenicity, a broad repertoire of targets, and the feasibility of chemical modifications. Most aptamers are developed in vitro using a SELEX procedure; however, some naturally occurring aptamers were also sparsely found to be the elements of cell machinery. Due to the unquestionable benefits that they provide, aptamers can be applied as therapeutics, biosensors, or diagnostics in diverse areas including modern biotechnology, molecular biology, and biomedicine. This Special Issue aims to cover fundamental aspects of aptamers, changing trends in aptamer technology, and their innovative applications in biotechnological and biomedical fields. We welcome submissions of research articles and reviews.

### Guest Editor

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### Deadline for manuscript submissions

closed (15 January 2024)



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The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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