



## Drug Discovery and Biochemical Mechanisms

Guest Editors:

**Dr. Stoyanka Atanasova**

Department of Organic  
Chemistry, Faculty of Chemistry,  
University of Plovdiv, 4000  
Plovdiv, Bulgaria

**Dr. Emiliya Demireva  
Cherneva**

Department of Chemistry,  
Faculty of Pharmacy, Medical  
University, 1000 Sofia, Bulgaria

Deadline for manuscript  
submissions:

**closed (20 May 2024)**

### Message from the Guest Editors

Dear Colleagues,

Researchers from academic institutions and pharmaceutical companies are always working toward the goal of discovering new medicines. The drug discovery area involves many different disciplines, such as biology, chemistry, pharmacology, biochemistry, and biotechnology. Numerous factors, such as toxicity, effectiveness, physicochemical characteristics, and bio/synthetic availability, may contribute to this challenge. Due to these factors, a constant goal is to find novel molecules with high potency and fewer negative effects.

This Special Issue, "Drug discovery and biochemical mechanism", will concentrate on the synthesis and/or biological effects of novel compounds created using medicinal chemistry methods, to improve activities against a variety of diseases, to understand the molecular mechanisms underlying life processes and disease from the protein structure to the signaling networks, and, finally, to apply this knowledge for creating new medications and therapies. Review (focused on the last ten years' developments.) and research articles on related topics are welcomed.





an Open Access Journal by MDPI

## Editor-in-Chief

**Prof. Dr. Giulio Nicola Cerullo**  
Dipartimento di Fisica,  
Politecnico di Milano, Piazza L.  
da Vinci 32, 20133 Milano, Italy

## Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

## Author Benefits

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), Inspec, CAPlus / SciFinder, and other databases.

**Journal Rank:** JCR - Q2 (*Engineering, Multidisciplinary*) / CiteScore - Q1 (General Engineering)

## Contact Us

---

Applied Sciences Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/applsci](http://mdpi.com/journal/applsci)  
[appls@mdpi.com](mailto:appls@mdpi.com)  
[X@Appls](#)