

Symmetry and Asymmetry in Medicinal Chemistry

Guest Editor:

Prof. Dr. Josef Jampilek

1. Department of Analytical
Chemistry, Faculty of Natural
Sciences, Comenius University,
Bratislava, Slovakia

2. Regional Centre of Advanced
Technologies and Materials,
Palacky University, Olomouc,
Czech Republic

Deadline for manuscript
submissions:

30 June 2024

Message from the Guest Editor

Dear Colleagues,

Symmetry, and, on the other hand, asymmetry (chirality), is one of the most important phenomena in nature, causing the uniqueness of life and life processes. Chirality is caused by a so-called chirality element in the structure of a molecule, which can be center (chiral atom), axis (with limited rotation around a simple bond), or plane. Any organism can be considered a chiral environment, and due to this phenomenon, it is possible to specifically influence the binding of biologically active compounds to their target sites, if their effect depends on the specific binding to the target organ.

The effect of diastereoisomers and even individual enantiomers can be completely different or even toxic. For this reason, in the last few decades, increased attention has been paid to the investigation of these optically active forms both in terms of binding to target sites and the detailed knowledge of the mechanism of action, including the structure of target sites and pharmacokinetic profile, i.e., bioavailability for target sites and affinity for metabolism at the formation of potentially toxic chiral metabolites...



mdpi.com/si/66173

Special Issue



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Sergei D. Odintsov

1. Institutió Catalana de Recerca
i Estudis Avançats (ICREA),
Passeig Luis Companys, 23,
08010 Barcelona, Spain
2. Institute of Space Sciences
(ICE-CSIC), C. Can Magrans s/n,
08193 Barcelona, Spain

Message from the Editor-in-Chief

Symmetry is ultimately the most important concept in natural sciences. It is not surprising then that very basic and fundamental research achievements are related to symmetry. For instance, the Nobel Prize in Physics 1979 (Glashow, Salam, Weinberg) was received for a unified symmetry description of electromagnetic and weak interactions, while the Nobel Prize in Physics 2008 (Nambu, Kobayashi, Maskawa) was received for the discovery of the mechanism of spontaneous breaking of symmetry, including CP symmetry. Our journal is named *Symmetry* and it manifests its fundamental role in nature.

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), CAPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

Journal Rank: JCR - Q2 (*Multidisciplinary Sciences*) / CiteScore - Q1 (*General Mathematics*); Q1 (*Physics and Astronomy*); Q1 (*Computer Science*)

Contact Us

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

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/symmetry
symmetry@mdpi.com
X@Symmetry_MDPI