



## Symmetry/Asymmetry in Life Sciences: Feature Papers 2024

Guest Editor:

**Prof. Dr. John H. Graham**

Department of Biology, Berry  
College, Mount Berry, GA 30149,  
USA

Deadline for manuscript  
submissions:

**31 December 2024**

### Message from the Guest Editor

Dear Colleagues,

Symmetry is invariant under some mathematical transformations, such as reflection, rotation, or translation. It may occur in three-dimensional space, as in the symmetrical geometry of organisms or molecules. Symmetry in time, though, is a fourth dimension, including symmetrical enzymatic reactions for example, and animal and human behaviors. Symmetry in additional dimensions is a possibility as well. Symmetries may also be symmetries of scale, such as fractals in nature and art.

Symmetries are often broken, and these are subject to study. Upon fertilization, for example, a spherical oocyte undergoes a series of broken symmetries, culminating in an adult organism that is no longer spherically symmetrical. Broken symmetry also arises in the molecules of life.. Deoxyribonucleic acid undergoes a conformational change that breaks helical symmetry during the processes of replication and translation.

Prof. Dr. John H. Graham  
*Guest Editor*





an Open Access Journal by MDPI

## Editor-in-Chief

### Prof. Dr. Sergei D. Odintsov

1. Institució 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)

## Contact Us

---

*Symmetry* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

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

mdpi.com/journal/symmetry  
symmetry@mdpi.com  
X@Symmetry\_MDPI