



life



an Open Access Journal by MDPI

Recent Advances in Bioluminescence

Guest Editor:

Dr. Liudmila P. Burakova

1. Photobiology Laboratory,
Institute of Biophysics SB RAS,
Federal Research Center
"Krasnoyarsk Science Center SB
RAS", Krasnoyarsk, Russia
2. Institute of Fundamental
Biology and Biotechnology,
Siberian Federal University,
Krasnoyarsk 660000, Russia

Deadline for manuscript
submissions:
closed (30 September 2023)

Message from the Guest Editor

Dear Colleagues,

Bioluminescence is a widespread phenomenon in nature, especially in the depths of the ocean. Representatives of luminous organisms are found among bacteria, fungi, protozoa, coelenterates, worms, molluscs, insects, and fish. Bioluminescence is a special case of a chemiluminescent reaction in which the substrate, luciferin, is oxidized, catalyzed by a specific enzyme, luciferase. Luciferins and luciferases of different organisms are different compounds and their similarity is often only functional. The Special Issue "Recent Advances in Bioluminescence" will be devoted to the fundamental and applied problems of bioluminescence.

Potential topics include, but are not limited to:

Study of molecular mechanisms of functioning of bioluminescent systems;

Synthesis and application of luciferin analogues;

Creation of analytical tools based on bioluminescent and fluorescent proteins;

Search for new bioluminescent organisms;

Modification of known bioluminescent proteins and substrates;

Creation of artificial bioluminescent proteins with desired properties.



mdpi.com/si/145977

Special *Issue*



life



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Lluís Ribas de Pouplana

Institute for Research in Biomedicine (IRB Barcelona), The Barcelona Institute of Science and Technology, 08028 Barcelona, Spain

Message from the Editor-in-Chief

Life (ISSN 2075-1729) is an international, peer-reviewed open access journal that publishes scientific studies related to fundamental themes in life sciences. Some papers are published individually, while others are submitted for inclusion in special issues with guest editors. You are invited to contribute a research article, essay, or a review to be considered for publication.

Author Benefits

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

High Visibility: indexed within [Scopus](#), [SCIE \(Web of Science\)](#), [PubMed](#), [PMC](#), [CAPlus / SciFinder](#), [AGRIS](#), and [other databases](#).

Journal Rank: JCR - Q1 (Biology) / CiteScore - Q1 (Paleontology)

Contact Us

Life Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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

mdpi.com/journal/life
life@mdpi.com
[X@Life_MDPI](#)