

Special Issue

Glycation in Health and Disease

Message from the Guest Editors

Glycation is the result of the covalent bonding of a free amino group from a biological macromolecule (DNA, protein & lipids) to reduced sugars or dicarbonyls, which results in the formation of advanced glycation end products (AGEs). Glycation has gained substantial attention recently for its alleged influence over various diseases' progression such as diabetes, atherosclerosis, cancer, and Alzheimer's disease. Age-related accumulation of AGEs could serve as danger signals to initiate and accelerate disease processes via mitochondrial perturbation. Glycation can trigger variable transcription factors. In addition, the receptor of AGE (RAGE) has been linked to various signaling pathways. How these pathways, transcription factors, and epigenetic alterations are conveyed through numerous pathologies' progression is still not fully understood. Our proposed work is expected to greatly enhance our understanding of glycation states under health and disease conditions. Published data and explanations will no doubt accelerate the discovery of new therapeutic targets for the treatment of glycation-associated complications in relation to health and disease.

Guest Editors

Dr. Firoz Akhter

Department of Biomedical Engineering, Stony Brook University, New York, NY 11794-5281, USA

Dr. Khurshid Ahmad

Department of Medical Biotechnology, Yeungnam University, Gyeongsan 38541, Republic of Korea

Deadline for manuscript submissions

closed (15 March 2023)



Biomolecules

an Open Access Journal
by MDPI

Impact Factor 4.8
CiteScore 9.2
Indexed in PubMed



mdpi.com/si/117642

Biomolecules
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
biomolecules@mdpi.com

[mdpi.com/journal/
biomolecules](https://mdpi.com/journal/biomolecules)





Biomolecules

an Open Access Journal
by MDPI

Impact Factor 4.8
CiteScore 9.2
Indexed in PubMed



[mdpi.com/journal/
biomolecules](https://mdpi.com/journal/biomolecules)



About the Journal

Message from the Editorial Board

Biomolecules is a multidisciplinary open-access journal that reports on all aspects of research related to biogenic substances, from small molecules to complex polymers. We invite manuscripts of high scientific quality that pertain to the diverse aspects relevant to organic molecules, irrespective of the biological question or methodology. We aim for a competent, fair peer review and rapid publication. Please look at some of the exciting work that has been published in *Biomolecules* so far. We would be delighted to welcome you as one of our authors.

Editors-in-Chief

Prof. Dr. Peter E. Nielsen

Department of Cellular and Molecular Medicine, Faculty of Health and Medical Sciences, University of Copenhagen, Blegdamsvej 3C, DK-2200 Copenhagen, Denmark

Prof. Dr. Lukasz Kurgan

Department of Computer Science, Virginia Commonwealth University, Richmond, VA 23284, USA

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, MEDLINE, PMC, Embase, CAPIus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Biochemistry)