



RNA Polymerase and Transcription Mechanism: Forefront of Physicochemical Study

Guest Editors:

Prof. Dr. Nobuo Shimamoto

National Institute of Genetics,
Mishima, Shizuoka 411-8540,
Japan

Dr. Masahiko Imashimizu

Cellular and Molecular
Biotechnology Research,
National Institute of Advanced
Industrial Science and
Technology, Koto-ku, Tokyo 135-
0064, Japan

Deadline for manuscript
submissions:

closed (31 August 2021)

Message from the Guest Editors

Dear Colleagues,

We tend to believe that our image on RNA polymerase and transcription have been basically established and that the methodological saturation slows further studies. However, understanding of the protein reactions is still distorted by “conventional image” of biomolecules. For example, rate equations are kept applied far beyond their limitations and Brownian ratchet is wrongly treated. The main goal of this Special Issue of Biomolecules is to clarify the ignored properties of macromolecules by rethinking the basis of chemical reaction in transcriptional regulations.

The topics includes (i) experimental and analytical tools for inhomogeneity of protein conformations, and (ii) the contribution of thermal processes in transcriptional regulation such as Brownian ratchet and one-dimensional diffusion.





an Open Access Journal by MDPI

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

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.

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, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q1 (*Biochemistry & Molecular Biology*) / CiteScore - Q1 (*Biochemistry*)

Contact Us

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

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

mdpi.com/journal/biomolecules
biomolecules@mdpi.com
[X@Biomol_MDPI](https://twitter.com/Biomol_MDPI)