Special Issue

Liquid-Liquid Phase Transition and Self-Assembly of Biomacromolecules

Message from the Guest Editors

Recently, it has been proposed that a liquid-liquid phase transition is responsible for the formation of membraneless organelles such as nucleoli, stress granules, and Cajal bodies. They form spontaneously in response to a variety of cellular signals, behave as liquid droplets, and allow the localization of specific biological functions. Many membraneless organelles contain proteins belonging to the class of intrinsically disordered proteins (IDP). These proteins have a low degree of structural order, which grants them the capacity of acting as a hub in the complex network of protein-protein interactions. It has been reported that IDP are directly involved either in the functional selfassembly of membraneless organelles or in the formation of insoluble pathological aggregates associated with various diseases. We invite interested colleagues to contribute to this Special Issue with original research articles and topical reviews with the aim of providing a compendium of the state of the art and encouraging further exploration of this fascinating theme.

Guest Editors

Dr. Pier Luigi San Biagio

Institute of Biophysics (IBF) of the National Research Council (CNR), Via Ugo La Malfa 153, 90146 Palermo, Italy

Dr. Donatella Bulone

Institute of Biophysics (IBF) of the National Research Council (CNR), Via Ugo La Malfa 153, 90146 Palermo, Italy

Deadline for manuscript submissions

closed (30 April 2023)



International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 8.1 Indexed in PubMed



mdpi.com/si/116380

International Journal of Molecular Sciences MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 ijms@mdpi.com

mdpi.com/journal/

ijms





International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 8.1 Indexed in PubMed





Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

Editor-in-Chief

Prof. Dr. Maurizio Battino

Department of Odontostomatologic and Specialized Clinical Sciences, Sez-Biochimica, Faculty of Medicine, Università Politecnica delle Marche, Via Ranieri 65, 60100 Ancona, Italy

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, MEDLINE, Embase, CAPlus / SciFinder, and other databases.

Journal Rank:

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

