molecules

an Open Access Journal by MDPI

IMPACT FACTOR 4.6

Indexed in: PubMed

CITESCORE 6.7

Physical Chemistry of Aqueous Solutions and Glass Forming Systems

Guest Editors:

Dr. Carmelo Corsaro
MIFT Department, University of Messina, Viale F. Stagno D'Alcontres 31, 98166 Messina, Italy

Prof. Dr. Enza Fazio
MIFT Department, University of Messina, Viale F. Stagno D'Alcontres 31, 98166 Messina, Italy

Deadline for manuscript submissions:
closed (31 July 2020)

Message from the Guest Editors

The thermodynamical behaviors of aqueous solutions resemble those of glass-forming systems and can be studied in the same theoretical framework, for example, that of the mode coupling theory. In fact, the hydrogen bonding ability of water, which is progressively enhanced by lowering the temperature, allows the formation of local clusters and dynamical heterogeneities, as in glass-forming systems. This holds also for aqueous solutions, such as hydrated proteins or water/alcohol mixtures. Thus, the importance of establishing a rigorous picture for these systems is at the borderline among physics, chemistry, biology, technology, and life science.

This Special Issue aims to cover recent advances in the experiments, theoretical modeling, and simulations within this area and toward nanotechnologies. Water, in fact, is the medium par excellence for the “development” of nanosystems, mainly polymers, with both hydrophobic and hydrophilic moieties showing competing properties.

molecules

IMPACT FACTOR 4.6 | Indexed in: PubMed | CITESCORE 6.7

an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Thomas J. Schmidt
Institute of Pharmaceutical Biology and Phytochemistry, University of Münster, Corrensstrasse 48, D-48149 Münster, Germany

Message from the Editor-in-Chief

As the premier open access journal dedicated to experimental organic chemistry, and now in its 25th year of publication, the papers published in *Molecules* span from classical synthetic methodology to natural product isolation and characterization, as well as physicochemical studies and the applications of these molecules as pharmaceuticals, catalysts and novel materials. Pushing the boundaries of the discipline, we invite papers on multidisciplinary topics bridging biochemistry, biophysics and materials science, as well as timely reviews and topical issues on cutting edge fields in all these areas.

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, Reaxys, CaPlus / SciFinder, MarinLit, AGRIS, and other databases.
Journal Rank: JCR - Q2 (*Chemistry, Multidisciplinary*) / CiteScore - Q1 (*Chemistry (miscellaneous)*)

Contact Us

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

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

mdpi.com/journal/molecules
molecules@mdpi.com
𝕏@Molecules_MDPI