



an Open Access Journal by MDPI

# Halogen Bonding: Fundamentals and Applications

Guest Editors:

### Message from the Guest Editors

Prof. Dr. Nathan I. Hammer

Department of Chemistry and Biochemistry, University of Mississippi, University, MS 38677, USA

#### Prof. Dr. Gregory Tschumper

Department of Chemistry and Biochemistry, University of Mississippi, University, MS 38677, USA

#### Dr. Davita L. Watkins

Department of Chemistry and Biochemistry, University of Mississippi, University, MS, USA

Deadline for manuscript submissions: closed (30 September 2019)



mdpi.com/si/15803

### Dear Colleagues,

Halogen bonds, analogous to the ubiquitous hydrogen bond, are noncovalent interactions between an electrophilic region of a halogen atom and a nucleophilic region of a molecular entity (e.g., electron-pair-donating heteroatoms or  $\pi$ -system). A reemergence of this special class of  $\sigma$ -hole bonding has recently attracted special attention. In recent years, ingenious design strategies, computational analyses, and structural models have afforded progression beyond the field of crystal engineering and pharmaceutics to material science and nanotechnology.

Inspired by the great potential of halogen bonding in supramolecular complexes and bottom-up approaches, it is the intention of this Special Issue to provide an overview on several aspects of halogen bonding in fundamental and applied science. This Special Issue "Halogen Bonding: Fundamentals and Applications" in Inorganics will take stock of the efforts and results of the many groups that have made evident progress in the field.

Prof. Dr. Nathan I. Hammer Prof. Dr. Gregory Tschumper Prof. Dr. Davita L. Watkins *Guest Editors* 







an Open Access Journal by MDPI

#### **Editor-in-Chief**

#### Prof. Dr. Duncan H. Gregory

School of Chemistry, University of Glasgow, University Avenue, Glasgow G12 8QQ, UK

#### Message from the Editor-in-Chief

Inorganic chemistry remains a lynchpin of modern chemistry, not only embracing the function and reactivity of combinations of most elements of the periodic table, but also providing a footing for studies of materials, catalysts, drugs, fuels and industrial chemicals. Arguably, the role and reach of inorganics in society have never been as great as today. Adventurous research at the heart and at the extremes of inorganic chemistry is vital to further advances and Inorganics offers authors the opportunity to publish exciting new research in an open access format.

## **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), CAPlus / SciFinder, and other databases.

**Journal Rank:** JCR - Q2 (Chemistry, Inorganic and Nuclear) / CiteScore - Q2 (Inorganic Chemistry)

## Contact Us

*Inorganics* Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/inorganics inorganics@mdpi.com X@inorganics\_MDPI