Special Issue

Hypercoordinate Carbon

Message from the Guest Editor

Although tetrahedral tetracoordination is the fundamental paradigm of organic chemistry, the identification of methanium ion, CH5+, in the laboratory through mass spectroscopic measurements challenged the way that one use to think about the coordination tendencies of carbon. While these experiments were carried out in 1950 and officially published in 1952, it took another 47 years to record the infrared (IR) spectrum of this simple protonated methane. The idea of making hypercoordinate carbon or silicon, or first-row or second-row elements in general, is not only to examine the coordination behavior of different elements but also to develop new materials. The main objective of this Special Issue is to collect some recent trends in this subject area, as the field is continuously emerging. Therefore, we wholeheartedly welcome contributions from both the experimental and theoretical scientific communities working in this intriguing field.

Guest Editor

Dr. Venkatesan S. Thimmakondu

Department of Chemistry and Biochemistry, San Diego State University, San Diego, CA 92182, USA

Deadline for manuscript submissions

closed (28 February 2023)

Chemistry

an Open Access Journal by MDPI

Impact Factor 2.4
CiteScore 3.9

mdpi.com/si/134671

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

mdpi.com/journal/chemistry

Chemistry

an Open Access Journal by MDPI

Impact Factor 2.4
CiteScore 3.9

mdpi.com/journal/chemistry

About the Journal

Message from the Editor-in-Chief

Chemistry is a broad science and in *Chemistry* we hope to showcase the excellence of this fundamental discipline. Open Access publishing allows scientists to publish their research in a way that reaches the widest possible audience. In *Chemistry* we aspire to build a genuinely transdisciplinary culture in which communication of results between scientists active in different areas and between scientists and the broader public highlights the benefits that chemistry can bring to society. We encourage papers on all aspects of chemistry ranging from astrochemistry to zoochemistry, with everything in between. We also very strongly welcome inter- and multidisciplinary papers which expand the subject beyond its present horizons. We also welcome themed issues collecting reviews and state-of-the-art papers in topical areas of chemical science.

Editor-in-Chief

Prof. Dr. Igor Alabugin
Department of Chemistry and Biochemistry, Florida State University, Tallahassee, FL 32306, USA

Author Benefits

High Visibility:

indexed within Scopus, ESCI (Web of Science), CAPlus / SciFinder, and other databases.

Reliable service:

rigorous peer review and professional production.

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 18.5 days after submission; acceptance to publication is undertaken in 3.6 days (median values for papers published in this journal in the first half of 2025).

MDPI