Special Issue

Planar Tetracoordinate Carbon—Fifty Years and Beyond

Message from the Guest Editor

In the last fifty years, a plethora of molecules containing ptC have been theoretically characterized, and some experimentally detected. Over a period of time, the idea has not only been extended to carbon group elements (Si, Ge, etc.) but also to other elements such as B, N, Al, and P and very recently even to the F atom. Molecules with a planar hypercoordinate carbon (phC) and other elements have also been witnessed in the literature over time. The core chemistry-based motivation in identifying these special classes of molecules stems from the fundamental fact that no two structural isomers of a given elemental composition behave in the same way chemically. Additionally, the idea of ptC or phC is a helpful tool to develop potential new 2D materials. The purpose of this Special Issue is to collect some recent trends in this subject area, as the field is continuously emerging and would supplement the existing literature. Therefore, we warmly welcome contributions from both experimental and theoretical scientific communities working in this field.

Guest Editor

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Message from the Editor-in-Chief

The scope of *Atoms* is deliberately wide and encompasses a large part of theoretical and experimental atomic,
molecular, nuclear, and chemical physics in order to encourage cross-disciplinary connections, while supporting the more traditional idea of individual subfields. The journal is also interested in papers concerning
the computation and compilation of data related to applications in the above areas. Details of experimental methods and codes are welcome. Your research is taken seriously and peer-reviewed with care. I encourage you
to contact me or any of the Editorial Board Members for further information.

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