







Special Issue Reprint

Tetrel Bonds

www.mdpi.com/books/reprint/6954

Edited by Steve Scheiner

ISBN 978-3-0365-0236-6 (Hardback) ISBN 978-3-0365-0237-3 (PDF)



The replacement of the bridging H atom in H-bonds by a multitude of other, more electronegative, atoms has led to the rapidly growing study of related noncovalent bonds generally known as halogen, chalcogen, and pnicogen bonds. It has recently been recognized that elements of the tetrel family (C, Si, Ge, Sn, Pb) also engage in such bonds, wherein the tetrel atom serves as an electron acceptor to an incoming Lewis base, and that these bonds can be quite strong. This type of bond has the potential to be of importance comparable even to that of the well-researched H-bond, as it may be far more prevalent than has been realized, perhaps a common feature of chemical and biological systems too numerous to mention. The articles included in this volume delve into the many facets of tetrel bonds: the factors determining their strength, their geometrical requirements, various phenomena in which they play an outsized role, and the means by which they can be detected and measured.





MDPI Books offers quality open access book publishing to promote the exchange of ideas and knowledge in a globalized world. MDPI Books encompasses all the benefits of open access – high availability and visibility, as well as wide and rapid dissemination. With MDPI Books, you can complement the digital version of your work with a high quality printed counterpart.



Open Access

Your scholarly work is accessible worldwide without any restrictions. All authors retain the copyright for their work distributed under the terms of the Creative Commons Attribution License.



Author Focus

Authors and editors profit from MDPI's over two decades of experience in open access publishing, our customized personal support throughout the entire publication process, and competitive processing charges as well as unique contributor discounts on book purchases.



High Quality & Rapid Publication

MDPI ensures a thorough review for all published items and provides a fast publication procedure. State-of-the-art research and time-sensitive topics are released with a minimum amount of delay.



High Visibility

Due to our global network and well-known channel partners, we ensure maximum visibility and broad dissemination. Title information of books is sent to international indexing databases and archives, such as the Directory of Open Access Books (DOAB), and the Verzeichnis Lieferbarer Bücher (VLB).



Print on Demand and Multiple Formats

MDPI Books are available for purchase and to read online at any time. Our print-on-demand service offers a sustainable, cost-effective and fast way to publish MDPI Books printed versions.

MDPI AG St. Alban-Anlage 66 4052 Basel Switzerland Tel: +41 61 683 77 34 www.mdpi.com/books books@mdpi.com

