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The series *Topics in Current Chemistry* presents critical reviews of the present and future trends in modern chemical research. The scope of coverage includes all areas of chemical science including the interfaces with related disciplines such as biology, medicine and materials science.

The goal of each thematic volume is to give the non-specialist reader, whether at the university or in industry, a comprehensive overview of an area where new insights are emerging that are of interest to larger scientific audience.

Thus each review within the volume critically surveys one aspect of that topic and places it within the context of the volume as a whole. The most significant developments of the last 5 to 10 years should be presented. A description of the laboratory procedures involved is often useful to the reader. The coverage should not be exhaustive in data, but should rather be conceptual, concentrating on the methodological thinking that will allow the non-specialist reader to understand the information presented.

Discussion of possible future research directions in the area is welcome.

Review articles for the individual volumes are invited by the volume editors.

**Readership: research chemists at universities or in industry, graduate students.**

More information about this series at <http://www.springer.com/series/128>

Thomas Wirth

Editor

# Hypervalent Iodine Chemistry

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# Preface

Hypervalent iodine chemistry has received widespread recognition by chemists during the last decade. This book is an update on the current state-of-the-art, including the use of traditional reagents in novel reactions which further highlight the potential of hypervalent iodine reagents as mild, selective and environmentally benign reagents. The development of novel hypervalent iodine reagents with altered reactivities now allow transformations which, only a decade ago, would have been unthinkable. These developments have led to special issues in journals and increased frequencies of conferences dedicated to this subject. They have also attracted young researchers to join the field and further develop the chemistry by means of their creativity and imagination. The compilation of current topics assembled in this book is a testimony to the many scientists who have contributed to the rapid development of hypervalent iodine chemistry in the past decade. The book should serve as a current dictionary and as a source of inspiration for research. I am very grateful to many distinguished colleagues who have contributed with their expert knowledge to make this comprehensive compilation on hypervalent iodine chemistry possible.

Cardiff, UK  
February 2016

Thomas Wirth



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