

Preface

Reactive oxygen species and reactive nitrogen species have received widespread attention, ranging from the research field of bioinorganic chemistry through biochemistry, pharmacology, toxicology, cell biology, all the way to medicine with issues of health and disease, leading to aspects of nutrition and lifestyle. This interest also extends to the plant world and to viruses and bacteria and other organisms. There is an important crosstalk between this latter field and the health aspects, namely the properties and use of redox active plant and microbial products, a rapidly developing field in redox science.

With this background, the editors of this monograph, Claus Jacob, Torsten Burkholz, Gilbert Kirsch, Alan Slusarenko, and Paul G. Winyard, have to be congratulated for assembling current knowledge in these areas. The wide range of topics reflects the impact of redox active products, from sources in biology, molecular identification of individual compounds, to classes of secondary plant products such as flavonoids, various sulfur compounds, and coumarins. Importantly, the basic knowledge on the sometimes overstressed terms of redox active and oxidative stress is provided. Biological processes are comprehensively considered, such as chemoprevention, inflammation, and other medical uses.

The book covers an impressive range, presented by experts in the field, so that we can be very thankful to the authors and editors for providing this timely information suitable for a widespread range of readers.

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Helmut Sies

Recent Advances in Redox Active Plant and Microbial
Products

From Basic Chemistry to Widespread Applications in
Medicine and Agriculture

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