

## BOOK REVIEW

### A New Unifying Biparametric Nomenclature that Spans all of Chemistry

by

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The perennial problem of unifying the nomenclature in chemistry has been elaborated in this book and a new approach for its possible resolution is presented. Nowadays, this problem is emphasized because of blurring the borders between the traditionally separated areas of chemistry (e.g. inorganic chemistry, organic chemistry, polymer chemistry, etc.). The new method for recognition of chemical compounds is based on molecular topology and it encompasses all fields of modern chemistry.

The book consists of preface, nine chapters and index. At the end of each chapter there exists an exhaustive list of references. The book is satiated with examples and illustrations of new the nomenclature proposed, so that chemists can easily read the text and understand it.

In **Chapter 1** (*INTRODUCTION*) the author outlines the problem of non-unifying nomenclature that presently is in the use and explains difficulties that arise from such approach. In addition he introduces a new biparametric nomenclature and gives the general rules for its application.

In **Chapter 2** (*NON-INTEGER BONDS*) the problem of naming the molecules that contain bonds that are not fully "single", "double", ..., but something in between is presented. The author explains the advantages of the new biparametric system of nomenclature for description of such molecules. These advantages are illustrated on more than twenty examples.

In **Chapter 3** (*OTHER SIGNIFICANT DIFFERENCES FROM EXISTING SYSTEMS*) the author discusses about benefits of the new biparametric system of nomenclature on several classes of compounds. He shows that by using the biparametric system of nomenclature one can closely approximate the actual geometry of the molecule. The new approach has ability to distinguish aliphatic and aromatic compounds, as well as to name the molecules with "unusual" bonding pattern.

In **Chapter 4** (*OXIDATION NUMBER*) the oxidation number from a point of view of its application in the standard nomenclature of inorganic compounds is elaborated.

In **Chapters 5, 6, 7, and 8** (*THE BORANES AND RELATED ALUMINIUM COMPOUNDS, SPIRO AND RELATED COMPOUNDS, TOPOLOGICALLY RESTRAINED COMPOUNDS, and POLYMERS*, respectively) the application of the biparametric system of nomenclature on some special classes of compounds is explained.

In **Chapter 9** (*MOLECULAR REARRANGEMENT*) the problem of naming the transition states, tautomerism, and etc. using the new biparametric nomenclature is investigated.

The book is written in a clear and understandable way. It is useful to all who are interested in a durable problem of naming chemical compounds and open-minded for new, different (maybe better) ideas concerning this topic. The new proposal of nomenclature stated in this book could be a starting point for unification and better understanding among chemical communities.

Boris Furtula