
BOOK REVIEW ON "DICTIONARY OF SCHIFF BASES"

Dictionary of Schiff Bases. Pt 1. By Bakhtiyar O.Minbayev (K.I.Satbayev Kazakh National Technical University. The Republic of Kazakhstan). Almaty. 2005. 319 p. ISBN 9965-583-23-7

Dictionary of Schiff Bases. Pt 2. By Bakhtiyar O.Minbayev (K.I.Satbayev Kazakh National Technical University. The Republic of Kazakhstan). Almaty. 2004. 310 p. ISBN 9965-673-86-1

During the last decade, the organic compounds with carbon double bond nitrogen with generalized formula $RR'C=NR$ so-called Azomethines, Imines, Aldimines, Ketimines and Schiff bases have attracted much attention of researchers as synthones and intermediates for usage in organic synthesis, analytical, coordination, physical, organic and supramolecular chemistry, as promising biological active compounds in medicine and as liquid crystals in electronics. It was also found out that they may be used as a suitable subjects for investigation of crucial problems of the theoretical organic and physical chemistry.

For more than 30 years the author has made seminal contributions into the general area of the chemistry of organic compounds containing double bond carbon-nitrogen and has published numerous research articles and books in Russian on chemistry of Schiff Bases: "The Schiff Bases", "Physico-Chemical Properties of Schiff Bases", "Spectral Characteristics of Schiff Bases".

This book by the author's intention is planning to be an important reference book for scientists who work with organic compounds containing carbon double bond nitrogen and useful guidebook for graduate and post-graduate students studying carbonyl compounds and their nitrogen derivatives.

This book covers the physico-chemical (boiling and melting points, density, index of refraction, optical rotation dispersion, dipole moment, yields in %), spectral (IR, UV, PMR, NMR, NQR and mass-spectrometry, circular dichroism) and crystallographical data, liquid crystalline and biological properties of more than 8000 representatives of this important class of organic compounds.

The author, Prof. B.O.Minbayev, has done an outstanding job of compilation data given by different researchers into a very cohesive and very readable book. All entries in the compilation were organized according to the molecular formula index system. The elements in the molecular formula were given according to the Hill convention (C,H, than other elements in alphabetical order). For the book of nearly encyclopedic reference, it is unusually easy to read; the author's sensitivity to style is evident.

The book consists of two parts, the first of which for the first time was published in 2001, but its revised and completed edition was republished in 2005. In the first three chapters of part I the data of Schiff bases of Saturated, Unsaturated Aliphatic Aldehydes and Aromatic Aldehydes are given. The recommended reviews and books on Schiff Bases chemistry also were given at the end of part I. The data of Schiff bases of other carbonyl compounds were given in part II.

The author has organized the material into chapters mainly on the basis of types of carbonyl components. The book's contents will give to the readers the overall scope of covered material: (Chapter 1) Schiff Bases of Aliphatic Aldehydes; (Chapter 2) Schiff Bases of Alicyclic Aldehydes; (Chapter 3) Schiff Bases of Aromatic Aldehydes; (Chapter 4) Schiff Bases of Heterocyclic Aldehydes; (Chapter 5) Schiff Bases of Some Functionally Substituted Carbonyl Compounds; (Chapter 6) Elementorganic Derivatives of Schiff Bases; (Chapter 7) Schiff Bases of Aliphatic Ketones; (Chapter 8) Schiff Bases of Halogenated Ketones; (Chapter 9) Schiff Bases of Alicyclic Ketones; (Chapter 10) Schiff Bases of Aromatic Ketones; (Chapter 11) Schiff Bases of Steroidal Ketones; (Chapter 12) Schiff Bases of Heterocyclic Ketones.

In conclusion this book represents a valuable and timely resource, which is expected to be especially useful to graduate students and researchers, and should be included in all scientific libraries.

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