



## METADATA

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### Abstract

The book describes basic principles of General Chemistry, Organic and Biological Chemistry, which are essential for Agricultural Sciences. All the basic concepts are presented in a simple and understandable manner without going into details, as it is aimed at students of Agricultural Sciences at Institutes of Technology for whom knowledge of basic chemistry principles is essential. Each chapter of the book is accompanied by numerous examples to facilitate the understanding of the concepts, as well as by exercises (closed type, multiple choice, etc.) designed to enable the reader to self-assess the degree of understanding of the theory. The first part of the book, consisting of eleven self-contained chapters (chapters 1-11), lists elements of General Chemistry, such as atomic structure, Periodic Table, solutions, colloids, colloids, acids bases salts, pH redox reactions, chemical equilibrium. At the end of Part 1, in chapter 11, selected inorganic compounds of particular

interest to Agricultural Sciences are described. In the second part, principles of organic chemistry are described. It consists of eight chapters. The first chapter of Part Two (chapter 12) describes the basic characteristics of organic compounds so that the reader can gradually become familiar with organic compounds. The following chapters (13th-19th) describe the specific characteristics, physical and chemical properties of the main homologous series (hydrocarbons, alcohols, phenols, aldehydes, aldehydes, ketones, carboxylic acids and their derivatives, amines). The third part of the book, chapters 20-24, deals with the main biological molecules (carbohydrates, lipids and proteins) and describes their basic chemical properties. Chapter 23 describes enzymes and the basic principles of their function. The final chapter of Part 3 (chapter 24) briefly describes the metabolic pathways that occur in organisms and the processes of energy production in organisms.

