

Bibliographic Reference: Koumpis, A., & Fylaktakidou, K. (2015). Mechanisms of Organic Reactions [Undergraduate textbook]. Kallipos, Open Academic Editions. http://dx.doi.org/10.57713/kallipos-850

Abstract

This book is suitable for bot undergraduate and postgraduate students who are taught the course of Organic Chemistry or more specialized courses related to Mechanisms of Organic Reactions. It can be used by readers familiar with the basic concepts of Organic Chemistry. With the help of this book, readers will be able to understand the most basic mechanisms governing organic reactions, namely: - Substitution and elimination reactions in aliphatic systems – Addition reactions at double bonds (C=C and C=O) – Reactions of enols and enolates – Substitution reactions on aromatic systems – Reactions that proceed through homolytic mechanisms

(radical reactions) – Pericyclic reactions (cycloadditions, electrocyclization reactions, rearrangements) – Oxidation and reduction reactions - Coupling reactions -Olefin metathesis reactions. Aimed goals for the reader are: - Enriching his knowledge and learning the main organic reactions from a mechanistic point of view. – The ability to recognize the mechanistic characteristics of a given organic reaction. For easier assimilation of the material of this book, this is enriched with exercises (self-assessment and general) as well as interactive elements.



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