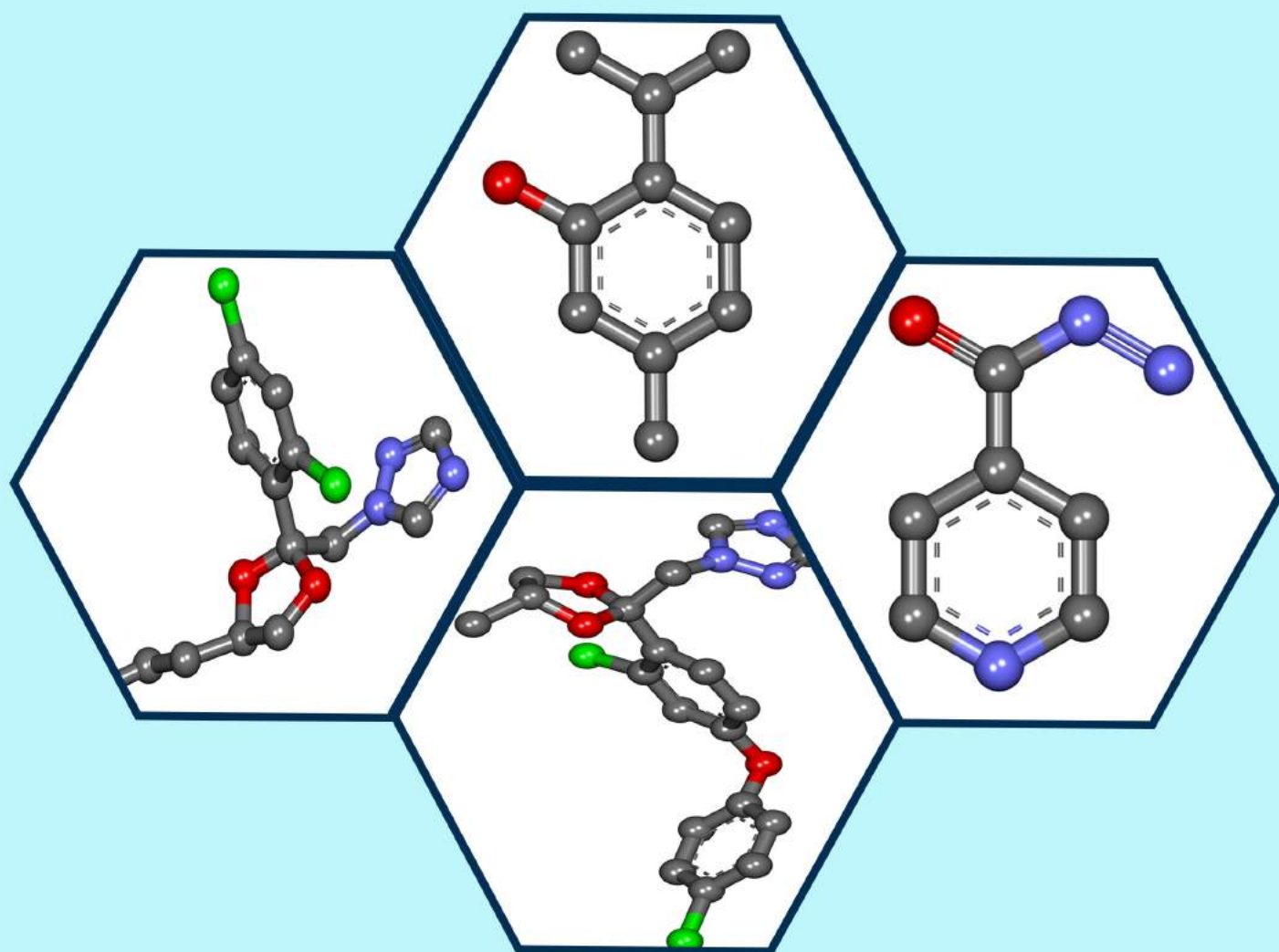


Small Bioactive Compounds: From Synthesis to Biological Evaluations



Dr. Jamatsing Darbarsing Rajput
Dr. Vikas Sambhaji Patil



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First Edition

Editors

Dr. Jamatsing Darbarsing Rajput

Dr. Vikas Sambhaji Patil



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Preface

It has been many years since the small molecules has proven their biological importance in relevant field. The landscape of small molecules has changed their importance in terms of not only synthesis but applicative nature in biological importance. Consequently, we have integrated what is important in new book. Today we have tackled such molecules that couldn't even be considered earlier, using reference that were far too difficult to compile back then.

Unlike published in few books, this book serves as an introduction to the recent small bioactive compounds and their reactions for preparation and biological evolution. Several different classes of chemists will benefit from reading this book:

- Experimental research chemist with minimal or no idea with biological activity may use this work as an introductory to the structural relationship with bioactive sites. They will discover how structural theory can be useful as an adjunct to their biological research to provide new insight into chemistry-biology problems.
- Students of biochemistry, biotechnology, microbiology at the undergraduate, Postgraduate, or beginning graduate level, will find this book a useful complement to standard text, enabling them experimental chemistry construct with biological discussed inside.
- Experienced biological chemist may use the discussions of advanced features found in each chapter to acquaint with advanced applicability with which they are unfamiliar yet.

Our aim in this book is to show readers how to use chemical structures to address their biological problems. All types of small molecules are discussed in the context of real chemistry and biological problems. All the time we strive to present the “best practices” with respect to chemical validity, biological accuracy, and accurate interpretation of eventual results.

Organization

The books 10 chapter covers a broad range of topics Chapter principal topics

1. Bioactive Nitrogenous Heterocyclic scaffolds of Thymol and Carvacrol
2. A systematic review on chemistry of remdesivir: promising agent for treatment of COVID-19
3. A short review in syntheses and bioactivity of 1H-1,2,4-triazole fungicide: Propiconazole and Difenoconazole.
4. Short overview on Sulfonamides: synthesis, biological activity, and its relationship with structure
5. Benzothiazole: A Potent Drug Contender
6. β -Cyclodextrin catalyzed new methods for the synthesis of small bioactive molecules
7. Synthesis and Biological Evaluation of Numerous Heterocyclic Derivatives of Isoniazid
8. Antimicrobial potencies of the synthesized novel azo-dipyrans from cyclic imides supported by PbO nanoparticles catalyst
9. Synthesis, Characterizations, and α -amylase Inhibitory Activity of Heterocyclic Thioamide Derivatives
10. Extraction, Isolation, Purification and Biological Studies of Natural Products

Dr. Jamatsing Darbarsing Rajput

Dr. Vikas Sambhaji Patil

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This book is based on small organic molecules synthesis and their biological applicability as active species. We are extremely grateful to the many peoples who helped us with this book at various point in its creation. Specifically, Dr. Satish V. Patil from School of life sciences, KBC North Maharashtra University, Jalgaon to provide helpful comments for perfection of book. Also Dr. Bhavana V. Mohite from Bajaj College of Science, Vardha, Maharashtra for specific drafting of book. Also, the literature support from main library at KBC North Maharashtra University is acknowledged.

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About Editors



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