

**ORGANIC CHEMISTRY,
NEW AND
REVISED EDITION,
PART II, PP. 305-559**

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Organic Chemistry, New and Revised Edition, Part II, pp. 305-559 by W. H. Perkin & F. Stanley Kipping

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NEW AND REVISED EDITION

BY

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PART II.

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P R E F A C E.

THE present volume (Part II.) consists principally of a description of the aromatic compounds, and, together with Part I., forms an introduction to Organic Chemistry.

The opening chapters of Part II. contain an account of coal-tar and its treatment. This leads naturally to a description of the preparation and properties of benzene, and to a discussion of its constitution in the light of facts previously dealt with; the student is thus made acquainted with the principal characteristics of aromatic, as distinct from fatty, compounds, and is then in a position to understand the classification of organic substances into these two main divisions.

The more important classes of aromatic compounds are then described, but in a somewhat different manner from that adopted in Part I., inasmuch as a general account of the properties of each class of substances is given before, instead of after, the more detailed description of typical compounds; this course is to a great extent free from the disadvantages, which are found to attend its adoption at earlier stages, as the student has by this time acquired some experience of the more systematic method from a study of the summaries given in Part I.

Special attention has been given, as before, to questions of constitution, one of the objects being to train the student to think out such matters, and to try and deduce a constitutional formula for a given substance, by comparing its properties with those of others of known constitution; with this end in view, it has often been thought desirable to withhold the most

important evidence in favour of the accepted constitutional formula until the subject had been discussed at some length.

The concluding chapters on dyes, alkaloids, and stereo-isomerism will doubtless offer the greatest difficulties, but, considering the importance of the matters with which they deal, their omission or curtailment was deemed unadvisable. The account of the alkaloids should be useful, more particularly to medical students, whilst the chapter on dyes deals with a variety of substances of even greater practical value, and indicates the methods employed in one of the most important applications of organic chemistry. The chapter on stereo-isomerism was included because, owing to the importance to which this theory has now attained, a text-book on organic chemistry would be incomplete without a brief discussion of the subject. The full directions which are given for the use of models will, it is hoped, lead to a clear conception of the views set forth.

The practical aspect of the science has again been kept well to the front, a detailed description of the preparation of all the more typical compounds being given (usually in smaller type), in order to facilitate the laboratory work, which must be regarded as a necessary accompaniment to the theoretical knowledge.

Our thanks are again due to Dr A. Harden for many valuable suggestions, as well as for help in revising the proof-sheets and in preparing the index.

PREFACE TO REVISED EDITION.

THE favourable reception accorded to our Text-book on Organic Chemistry, and the constantly increasing support which it has received during recent years, have led us to undertake already a complete revision of Parts I. and II. in order to bring the whole of the subject-matter thoroughly up to date. Although, in doing so, we have not introduced any noteworthy change in the general plan of the work, we have found it necessary to make throughout many alterations of considerable importance in order to take account of the new facts and views which have come into prominence in the course of the rapid and continued progress of Organic Chemistry. Certain chapters, indeed, have been almost entirely rewritten and numerous additions have been made, but as it has also been possible to omit or condense portions of the old text dealing with matters of diminishing importance, the size of the book has not been very materially increased; we trust, therefore, that the revised edition will prove useful to the same classes of students as those for whom the original one was intended.

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