

THOMAS LAUE
ANDREAS PLAGENS



Named
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Reactions

SECOND EDITION

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Named Organic Reactions 2nd Edition

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Translated into English by Dr. Claus Vogel

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Introduction to the 2nd Edition

Named reactions still are an important element of organic chemistry, and a thorough knowledge of such reactions is essential for the chemist. The scientific content behind the name is of great importance, and the names themselves are used as short expressions in order to ease spoken as well as written communication in organic chemistry. Furthermore, named reactions are a perfect aid for learning the principles of organic chemistry. This is not only true for the study of chemistry as a major subject, but also when studying chemistry as a minor subject, e.g. for students of biology or pharmaceuticals.

This book—*Named Organic Reactions*—is not meant to completely replace an organic chemistry textbook. It is rather a reference work on named reactions, which will also be suitable for easy reading and learning, as well as for revision for an exam in organic chemistry. This book deals with about 135 of the most important reactions in organic chemistry; the selection is based on their importance for modern preparative organic chemistry, as well as a modern organic chemistry course.

In particular, the reactions are arranged in alphabetical order, and treated in a consistent manner. The name of the reaction serves as a heading, while a subtitle gives a one sentence-description of the reaction. This is followed by a formula scheme depicting the overall reaction and a first paragraph with an introductory description of the reaction.

The major part of each chapter deals with mechanistic aspects; however, for didactic reasons, in most cases not with too much detail. Side-reactions, variants and modified procedures with respect to product distribution and yields are described. Recent, as well as older examples for the application of a particular reaction or method are given, together with references to the original literature. These examples are not aimed at a complete treatment of every aspect of a particular reaction, but are rather drawn from a didactic point of view.

At the end of each chapter, a list of references is given. In addition to the very first publication, and to review articles, references to recent and very recent publications are often given. This is meant to encourage work with, and to give access to the original literature, review articles and reference works for a particular reaction. The reference to the very first publication on a reaction is aimed at the origin of the particular name, and how the reaction was explored or developed. With

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the outlining of modern examples and listing of references, this book is directed at the advanced student as well as doctoral candidates.

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