

The Comprehensive E-book of named organic reactions and their mechanisms

Elbertus Kruiswijk

www.namedorganicreactions.co.uk

About the Author

Elbertus Kruiswijk was born in Utrecht, the Netherlands in 1968 and studied Chemistry at the University of Utrecht. He graduated in the Metal-mediated organic synthesis group of Gerard van Koten in 1996. He later moved to the University of Wales in Cardiff where in 1999 he received his PhD in Organic Chemistry under the supervision of Mark Elliott. He then spent a year as a post-doctoral Research Assistant in Ben Feringa's group at Groningen, The Netherlands. Since 2001, he has been involved as a post-doctoral Research Associate on a combined project between DSTL, Porton Down and the Bacterial Toxins group School of Crystallography, School of Biological and Chemical Sciences (David Moss and Howard Carless) at the University of London, Birkbeck College. Bert is also a qualified teacher.

The word 'comprehensive' can truly be used for this excellent reference work.

Dr. M.E. Cooper.

This book will be an essential purchase for any chemist with an interest in synthetic organic chemistry.

Dr. J. Brinksma, Syncom BV

This work is best suited for the practicing researcher, as it provides a valuable resource for deeper searching on a given reaction.

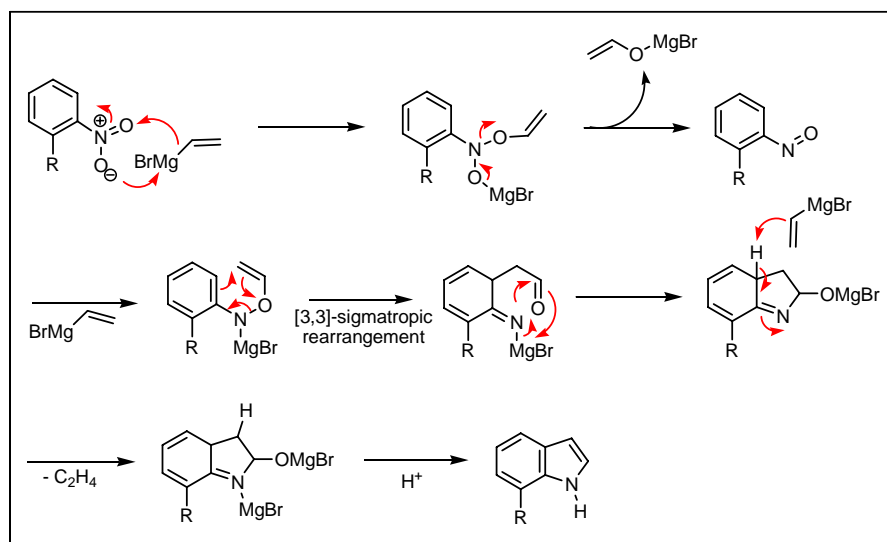
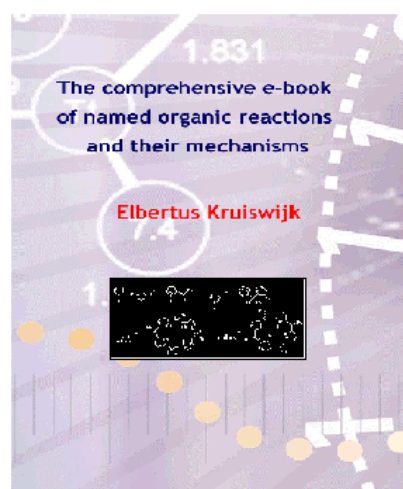
JACS, Book review

The book is recommended for students and researchers involved in organic synthesis and working in research, industrial, and other laboratories.

CEJC, Book review

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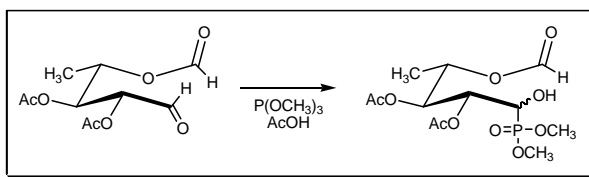
Unique work. Over 1300 named reactions, covering 2800+ pages. Most books on named organic reactions only cover the 300 best-known reactions. The emphasis of this book is to guide people in the right direction to find more information about a certain named organic reaction. The author assumes that the reader of this book has a basic knowledge of organic chemistry at undergraduate level.

An example of the reaction is given followed by a step-by-step description of how the reaction occurs and the disconnection. The reaction is discussed briefly and references are then given. An experimental section is introduced in phases over the next few years.

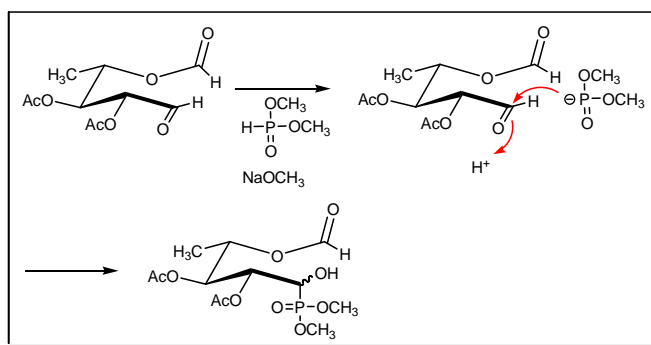
The literature references cover reviews, some classical and some modern articles. In addition, publications in the free online journals are covered. In total there are over 7200 references and covers the literature up until and included December 2006.

EXAMPLE :

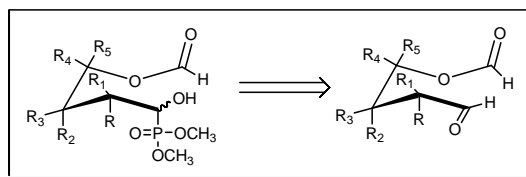
SCALED DOWN EXAMPLE



MECHANISM :



DISCONNECTION :



NOTES :

The O-benzylated glycal is oxidatively cleaved to the aldehyde sugar bearing a formate ester at C-5. This carbon atom is originally the anomeric carbon atom. The condensation with trimethyl phosphite in glacial acetic acid or with dimethyl phosphite under basic conditions introduces the dimethylphosphonyl moiety. See also **Arbuzov (Michaelis – Arbuzov)**, **Michaelis – Becker – Nylén** and **Perkow** reactions.

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COMMENTS :