**Synopsis**

At a time when environmental concerns are increasing, it's important that chemical processes are as environmentally friendly as possible. This book outlines various methods for producing inorganic and organic solvents without the use of traditional solvents that can have detrimental effects on the environment. This is the first book to give extensive and exclusive coverage to the topic. Includes important environmental issues. This book will appeal to anyone with an interest in organic synthesis; reaction chemistry; catalysis; and process development, and to undergraduate and graduate students of organic chemistry; catalysis; green chemistry; clean technology and environmental chemistry courses.

**Book Information**

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**Customer Reviews**

"a convenient and effective book giving a good introduction to the possibilities and problems of new reaction media" (Angewandte Chemie International Edition, 2004/43) "...a well-written and timely piece of work for any scientists and engineers who work with solvents...and will be a valuable addition to their bookshelves." (Energy Sources, Vol. 26, 2004) "...well written and easy to read, very useful for a student audience...will introduce the subject to a wider audience..." (Organic Process Research & Development, Dec 2003)

The use of organic solvents and their emissions has been at the centre of major environmental concern in recent years, and there is currently a great deal of interest in finding alternatives to halogenated and volatile organic solvents for synthesis. Chemistry in Alternative Reaction Media
explores why solvents are used and the problems associated with them. It describes the state-of-the-art in solvent replacement technologies. Supercritical fluids, biphasic reactions, ionic and fluorous liquids, and aqueous chemistry are brought together in a single textbook, which explains how they may be used to increase reaction efficiency, improve separation and catalyst recovery, and reduce emissions to the environment. As well as describing the principles behind these methods, and the environmental, economic and chemical advantages that these alternatives can bring, numerous examples of applications are given including most major reaction types, and consideration is given to potential scale-up and industrial use. This book will appeal to anyone with an interest in organic synthesis; reaction chemistry; catalysis; and process development, and to undergraduate and graduate students of organic chemistry; catalysis; green chemistry; clean technology and environmental chemistry courses.

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