 DESCRIPTION

This second edition of the pioneering work on this hot topic captures the major trends and latest achievements in the art of asymmetric catalysis on an industrial scale. A number of completely new real-life case studies written by the world leaders in their respective areas provide a compact and qualified insight into this developing field. The resulting ready reference and handbook collates first-hand and valuable information within a context where it can be easily found.

The high-quality contributions illustrate the relevant environments and situations, such as time pressure, how the catalytic step fits into the overall synthesis, or competition with other synthetic approaches, as well as the typical problems encountered in the various phases, including finding/developing the catalyst and optimization of the process or choice of equipment. Both successful and unsuccessful approaches to solve these problems are described.

 ABOUT THE AUTHOR

Hans-Ulrich Blaser carried out his doctoral research with A. Eschenmoser at the Federal Institute of Technology (ETH) Zürich, where he received the Ph.D. degree in 1971. Between 1971 and 1975 he held postdoctoral positions at the University of Chicago (J. Halpern), Harvard University (J.A. Osborn), and Monsanto (Zürich). During 20 years at Ciba-Geigy (1976-1996) he gained practical experience at R&D in the fine chemicals and pharmaceutical industry, which continued at Novartis (1996-1999) and at Solvias where he presently is chief technology officer.
Hans-Jürgen Federsel is a renowned specialist in the field of process R&D with a professional career spanning over 30 years. Starting off as bench chemist in Astra at the major Swedish site in Södertälje, he climbed the ranks to occupy positions both as line and project manager. After the merger that formed AstraZeneca, he became Head of Projects Management at the aforementioned location and was then appointed to the newly created role as Director of Science in Global Process R&D in 2004. In connection with this, he was also given the prestigious title Senior Principal Scientist. His strong academic links have been further developed over the years after obtaining the PhD in Organic Chemistry at the Royal Institute of Technology in Stockholm, which was led to his being awarded an Associate Professorship there.

His long-lasting links to this Institute has brought him a seat on the Board of the School of Chemical Science and Engineering from 2005. Publishing in peer reviewed journals and books and frequent lecturing has rendered fame to his name that goes far beyond the limits of the own company and Dr. Federsel enjoys invitations from all over the world to share learning and experience from his broad knowledge base on process R&D. In 2009 he was elected to the Royal Swedish Academy of Engineering Sciences (IVA).

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