Here, the whole range of the functionalization of CH-bonds is presented for the first time in one handbook, with the focus throughout on topicality and practicability. Topics span modern catalysts for Friedel-Crafts type reactions to transition metal catalysts for the oxofunctionalization, via new methods for radicalic halogenation to domino processes by catalytic ortho metalation.

Renowned for his research as well as for his excellent articles and reviews, Gerald Dyker provides in these two volumes reliable and typical experimental procedures, thus lending the book great practical value.

About the Author

Gerald Dyker was born in 1960. He studied chemistry at Dortmund University where he received his doctorate in 1988 for a thesis on ortho-quinonoid hetarenes. After postdoctoral research on ruthenium catalysis at Stanford University, he worked as a research chemist at Bayer AG in the field of veterinary pharmaceuticals. A Liebig fellowship enabled the completion of his habilitation on palladium catalyzed domino processes in 1994 at the Technical University of Braunschweig. Between 1995 and 1999 he was Professor for Organometallic Chemistry at Duisburg University. Since 2000 he has been Professor for Organic Chemistry at Bochum University. In addition to transition metal catalysis his current research interests include the synthesis of various complex targets, such as ligands with multiple coordination sites and a "nanodimensional baseball glove" for the complexation of metallic nanoparticles.