DESCRIPTION

Summarizing the emerging field of N-heterocyclic carbenes used in organocatalysis, this is an excellent overview of the synthesis and applications of NHCs focusing on carbon-carbon and carbon-heteroatom bond formation. Alongside comprehensive coverage of the synthesis, characteristics and applications, this handbook and ready reference also includes chapters on NHCs for polymerization reactions and natural product synthesis.

ABOUT THE AUTHOR

A. T. Biju received his M. Sc. from Sacred Heart College Thevara (affiliated to MG University, Kerala, India) and Ph.D. under the guidance of Dr. Vijay Nair at the CSIR-NIIST (Formerly RRL), Trivandrum, India. Subsequently, he has been a post-doctoral fellow with Prof. Tien-Yau Luh at the National Taiwan University, Taipei and an Alexander von Humboldt fellow with Prof. Frank Glorius at the Westfälische Wilhelms-Universität Münster, Germany. In June 2011, he began his independent research career at the CSIR-National Chemical Laboratory, Pune. From June 2017 onwards, he has been an Associate Professor at the Department of Organic Chemistry, Indian Institute of Science, Bangalore. His research focuses on the development of transition-metal-free carbon-carbon and carbon-heteroatom bond-forming reactions using aryne chemistry and N-heterocyclic carbene (NHC) organocatalysis, and their application in organic synthesis. He is the recipient of AVRA Young Scientist Award (2016), CRSI Young Scientist Award (2015), NCL-Research Foundation Scientist of the Year Award (2014), ISCB Young Scientist Award (2014), Thieme Chemistry
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