

Contents

1	<i>N</i>-Heterocyclic Carbenes: An Introductory Overview	1
	Luigi Cavallo and Catherine S. J. Cazin	
2	<i>N</i>-Heterocyclic Carbene Complexes in Additions to Multiple Bonds	23
	Andreas A. Danopoulos	
3	<i>N</i>-Heterocyclic Carbene Complexes in Olefin Metathesis	63
	Xinjun Luan, Reto Dorta, Anita Leitgeb, Christian Slugovc, Sascha Tiede, and Siegfried Blechert	
4	<i>N</i>-Heterocyclic Carbene Complexes in Polymerisation, Oligomerisation and Telomerisation Reactions	105
	David S. McGuinness and Kingsley J. Cavell	
5	<i>N</i>-Heterocyclic Carbene Complexes in Cyclisation Reactions	131
	Janis Louie	
6	<i>N</i>-Heterocyclic Carbene Complexes in Cross-Coupling Reactions	157
	Eloísa Jiménez-Núñez and Manuel Alcarazo	
7	<i>N</i>-Heterocyclic Carbene Complexes in Arylation Reactions other than Cross-couplings	191
	Christophe Berini and Oscar Navarro	
8	<i>N</i>-Heterocyclic Carbene Complexes in Dehalogenation Reactions	207
	Elena Mas-Marzá, Michael J. Page, and Michael K. Whittlesey	
9	<i>N</i>-Heterocyclic Carbene Complexes in Reactions Involving Carbon Monoxide	217
	Matthew Jeletic and Adam Veige	

10	<i>N</i>-Heterocyclic Carbene Complexes in Oxidation Reactions.....	237
	Václav Jurčík and Catherine S. J. Cazin	
11	<i>N</i>-Heterocyclic Carbene Complexes in other Transition Metal Mediated Reactions	253
	Tracy D. Nixon and Jonathan M. J. Williams	
12	<i>N</i>-Heterocyclic Carbenes in Organocatalysis	263
	Craig D. Campbell, Kenneth B. Ling, and Andrew D. Smith	
13	<i>N</i>-Heterocyclic Carbene Complexes: Decomposition Pathways.....	299
	Kingsley J. Cavell and Adrien T. Normand	
14	<i>N</i>-Heterocyclic Carbene Complexes in Industrial Processes	315
	Oliver Briel and Catherine S. J. Cazin	
	Erratum	E1
	Index.....	325

N-Heterocyclic Carbenes in Transition Metal Catalysis
and Organocatalysis

Cazin, C.S.J. (Ed.)

2011, XVI, 340 p., Hardcover

ISBN: 978-90-481-2865-5