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Title:	Can Remote N-Heterocyclic Carbenes Coordinate with Main Group Elements? Synthesis, Structure, and Quantum Chemical Analysis of N <sup>+</sup> -Centered Complexes
Authors:	Mandal, S.K. (/jspui/browse?type=author&value=Mandal%2C+S.K.)
Keywords:	Carbene ligands Divalent NI compounds Donor-acceptor systems Quantum chemical analysis
Issue Date:	2018
Publisher:	Wiley-VCH Verlag
Citation:	Chemistry - A European Journal, 24(24), pp. 6418-6425
Abstract:	Remote N-heterocyclic carbenes (rNHCs), such as N-methyl-4-pyridylidene, are known to form coordination complexes with TMs. Herein, it is established that rNHCs can also coordinate to the N <sup>+</sup> centre. Synthesis of some novel divalent NI complexes with the general formula (rNHC)→N <sup>+</sup> ←(NHC) and (rNHC)→N <sup>+</sup> ←(rNHC) was achieved, and X-ray diffraction studies supported the coordination bond character between the rNHCs and the N <sup>+</sup> centre. Quantum chemical analysis established the presence of divalent NI character at the central nitrogen in these systems
Description:	Only IISERM authors are available in the record.
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