

Formation of a Doubly C,N-Bridged Six-Membered Metallacyclic Bis[(2-imidazolyl)zirconocene] Dication

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Treatment of 1-methylimidazol-2-yl lithium with $\text{Cp}_2\text{Zr}(\text{Cl})\text{CH}_3$ (**6**) gave the corresponding methyl(1-methyl-2-imidazolyl)zirconocene complex **7**. Treatment of **7** with $\text{B}(\text{C}_6\text{F}_5)_3$ (**8**) led to selective methyl abstraction. The resulting (imidazolyl)zirconocene cation **9** dimerized under the reaction conditions to yield the dinuclear imidazolyl bridged bis(zirconocene) dication complex **10** that was structurally characterized by X-ray diffraction and by DFT calculations.

Key words: Zirconocene Cation, Methyl Abstraction, Arduengo Carbene, Imidazole, DFT Calculation