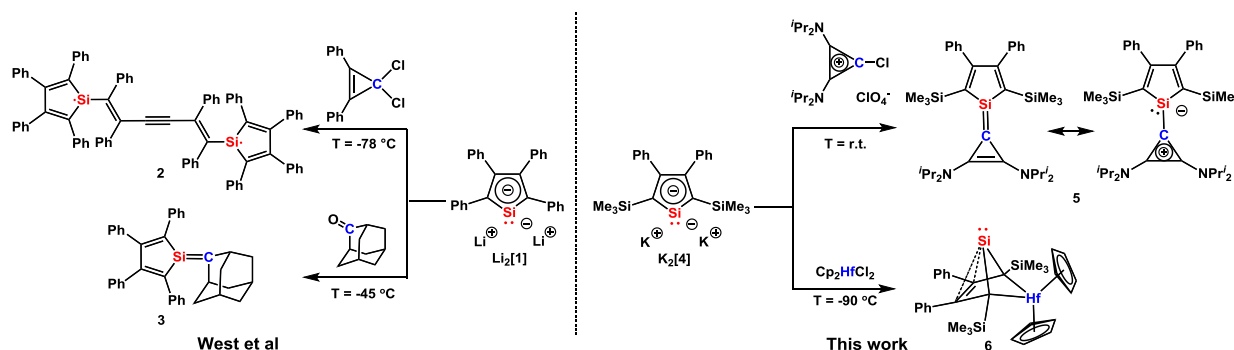


Low-Valent Silicon Compounds Based on 2,5-Disilylsilole Dianions

Zhaowen Dong¹, Thomas Müller*¹¹ Carl von Ossietzky University of Oldenburg, Institute of Chemistry, Carl von Ossietzky Straße 9-11, D-26129 Oldenburg, European Union

E-Mail: zhaowen.dong@uni-oldenburg.de

Silole dianions have attracted increasing attention, due to their unique electronic structure, aromaticity and high reactivity.^[1] In their pioneering work, the group of Bob West studied the synthesis and reactivity of 1,1-dilithio-2,3,4,5-tetraphenylsilole Li₂[**1**].^[2] In the course of their studies, they reported on the synthesis of a stable triplet diradical **2** and interesting 5-silapentafulvene **3** (Scheme 1).^[2b,2c] Unfortunately, there is no further work reported on the synthesis and reactivity of silole dianions with different substituents. Stimulated by that, our group concentrates on investigating the synthesis and reactivity of 2,5-disilylheterole dianions in recent years.^[3] Here we report on the synthesis of thermally stable silacalicene **5** and bicyclo[2.1.1]hexene silylene (BCHSi) **6**^[3b] by the reactions of dipotassium silacyclopentadienediide K₂[**4**] with 1,2-bis(diisopropylamino)-3-chlorocyclopropenyl perchlorate and hafnocene dichloride (Scheme 1).

**Scheme 1.** Reactivities of 2,5-diphenylsilole dianion **1** and 2,5-disilylsilole dianion **4**.

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