

## Phosphinoamidinate-supported disilylene and its reactivity

Aliona G. Baradzenka<sup>[a]</sup> and Georgii I. Nikonov<sup>[a]</sup>

<sup>[a]</sup> Department of Chemistry, Brock University 1812 Sir Isaac Brock Way, St. Catharines, Ontario L2S 3A1, Canada

A new phosphinoamidinate-supported disilylene  $({\kappa^2(N,P)-NNP}Si)_2$  was prepared and its reactivity towards H-E bonds (E = elements from group 13 to 15) was studied. Reactions of  $({\kappa^2(N,P)-NNP}Si)_2$  with the silicon and germanium dichlorides L·ECl<sub>2</sub> (E = Si, L = IPr; E = Ge, L = dioxane) result in formal tetrylene insertions into the Si–Si bond, leading to novel bis(silylene), disilylene and silylene-germylene products (Figure 1).

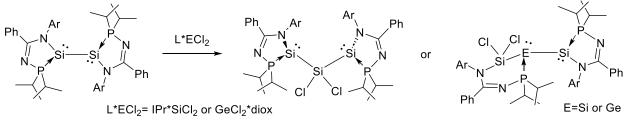


Figure 1.

## **References**

- 1. A. G. Baradzenka, M. Pilkington, A. Dmitrienko, R. Simionescu, G.I. Nikonov, Inorg. Chem. 2021, 60, 13110.
- 2. A. G. Baradzenka, S.F. Vyboishchikov, M. Pilkington, A. Dmitrienko, G.I. Nikonov, *Chem. Eur. J.* **2022**, *28*, e202202799.