1. Introduction: Ferrocene-based NHCs of type 1 exhibit a highly unexpected reactivity, esp. towards small molecules\(^1\)

Milestone: First stable NHC by ARDUENGO et al. in 1991\(^2\)

Nowadays: Diaminocarbenes are “ordinary” compounds\(^3\)

Unexpected reactivity: NHC 1 activates small molecules\(^1\)

Concept: ‘main-group elements as transition metals’\(^3\)

The aim of this research: Synthesize and study ferrocene-based N-heterocyclic silylenes (NHSi) and heavier homologues of type 2

Motivation: Do heavier homologues of NHC 1 – esp. silylenes – show unusual properties, too?

2. Synthesis of ferrocene-based N-heterocyclic silylenes

3. Synthesis of ferrocene-based N-heterocyclic germynes, stannylenes and plumbbylenes

4. References