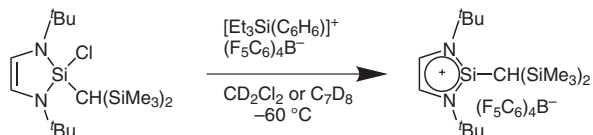


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Generation and Aromaticity of 2-Silaimidazolium Ion, a New  $\pi$ -Conjugated Silylium Ion  
*Chem. Commun.* **2005**, 778-780.

## Generation and Aromaticity of 2-Silaimidazolium Ion, a New $\pi$ -Conjugated Silylium Ion



**Significance:** The 2-silaimidazolium ion, a new kind of heterocyclic aromatic cation has been generated from the corresponding chlorosilane by a chloride abstraction using  $\text{Et}_3\text{Si}(\text{benzene})$  tetrakis(pentafluorophenyl)borate. The silaimidazolium ion is stable at temperatures below  $-10\text{ }^\circ\text{C}$  and was fully characterized by  $^1\text{H}$ ,  $^{13}\text{C}$  and  $^{29}\text{Si}$  NMR parameters which were compared with theoretical calculations [ $^{29}\text{Si}$  NMR 53.0 ( $\text{CD}_2\text{Cl}_2$ ) and 53.2 ( $\text{C}_7\text{D}_8$ ) for the 2-silaimidazolium compared to the chlorosilane ( $-17.7$  in  $\text{CD}_2\text{Cl}_2$ )].

**Comment:** Silylene compounds have been a focus of structural interest for the last ten years (B. Tumanskii, P. Pine, Y. Apeloig, N. Hill, R. West *J. Am. Chem. Soc.* **2004**, 126, 7786-7787). However, this represents the first synthesis and full characterization of a silaimidazolium ion which will undoubtedly trigger studies on scope and limitation of the synthetic route and reactivity, as well as efforts to derive new silanimine systems. For simple Si=N derivatives, see N. Wiberg, K. Schurz *J. Organomet. Chem.* **1988**, 341, 145-164.

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Synfacts 2005, 0, 0024-0024  
**DOI:** 10.1055/s-2005-865366; **Reg-No.:** V00105SF

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