

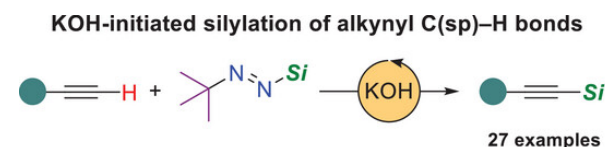
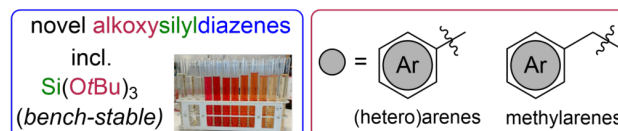
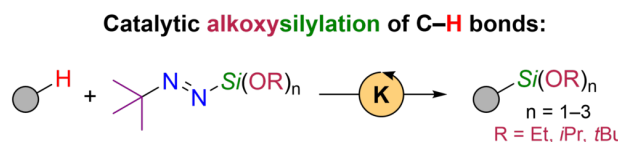
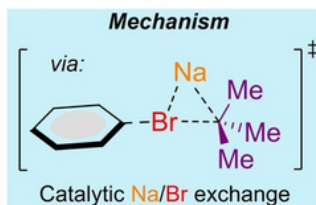
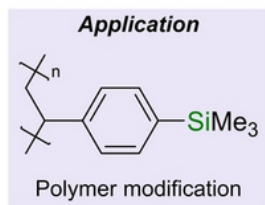
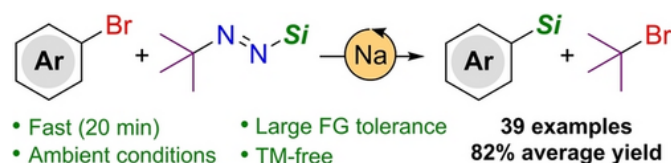


第102回有機元素化学セミナー

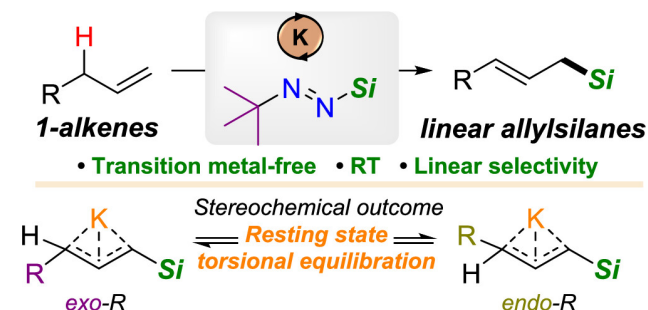
The 102nd Organoelement Seminar Series

Prof. Clément CHAUVIER (Sorbonne Université, France)

"Organoalkali-Catalyzed C–Si Cross-Couplings with *N*-*tert*-Butyl-*N*'-Silyldiazenes"



• Fast (< 3 h) • Ambient conditions • TM-free • Large silyl group scope



This lecture will describe the invention and development of a novel C–Si cross-coupling strategy through the design of a new class of silylating reagents, namely silylated *tert*-butyl diazenes ($t\text{Bu}-\text{N}=\text{N}-\text{SiR}_3$). The synthetic utility of these reagents will be demonstrated in their ability to rapidly assemble diverse organosilicon compounds via the silylation of C–H and C–Br bonds upon simple treatment with catalytic amounts of alkali metal alkoxides. Mechanistic considerations highlighting the involvement of alkali metal-stabilized *tert*-butyl carbanion intermediates will be discussed along with their conceptual implications, notably for transposing the stoichiometric metalation chemistry of group 1 polar organometallic reagents (e.g. organolithium compounds) into a catalytic framework.

15:00-16:15, October 21 (Wed), 2026@Room M-124 (1st floor, main building, Institute of Science Tokyo)
Host: Makoto Yamashita (Sch. of Sci.) (yamashita.m.6dbb@m.isct.ac.jp)