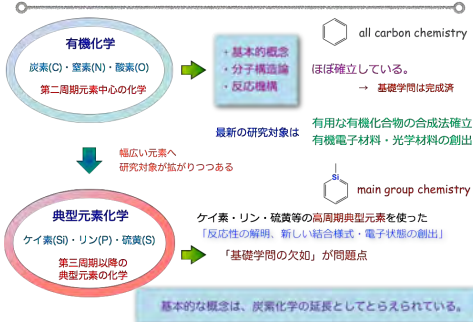
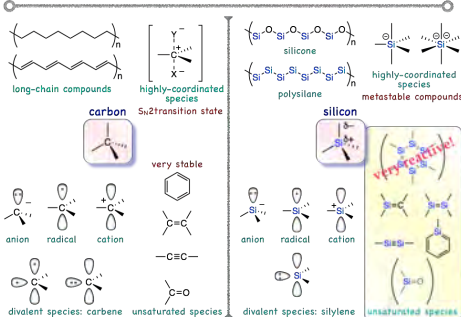




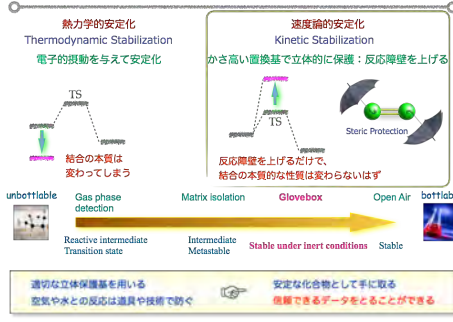
高周期典型元素の化学



Difference between "Carbon" & "Silicon"



活性化学種の安定化の手法



典型元素化学の目標

分子構造・反応性の解明: 炭素化学との差異を明確化
「元素特性」の確立
高周期元素の特性を活かした新しい機能・物性の探求

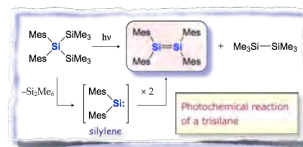
"double bond rule"
Heavier elements than the third row cannot form a stable double bond.

1948 K. Pitzer

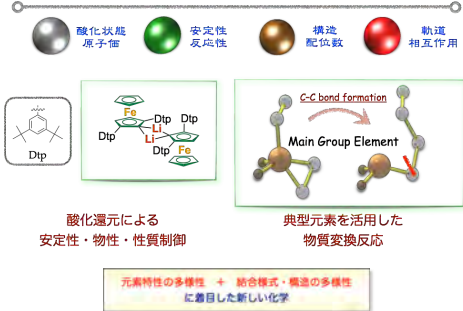
Properties of Si=Si double bonds?

1981 Robert West
West, R.; Fink, M. J.; Michl, J.,
Science, 1981, 214, 1343-1344.

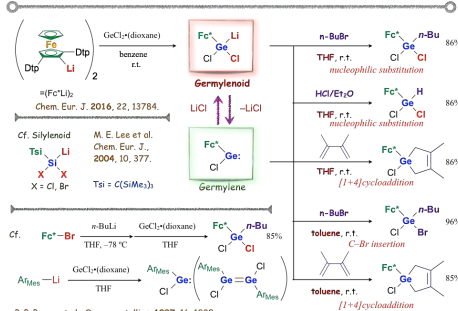
Since then, many stable disilenes have been synthesized.



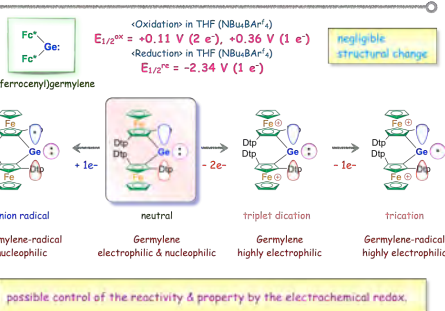
Recent Project



Generation of Germerylenoid: Control of Reactivity



Redox Property of Bis(ferrocenyl)germylene



Preparation of Ferrocenyl Lithium Dimer

Tailor-made Glasswares

Tailor-made Glasswares

Acknowledgment