

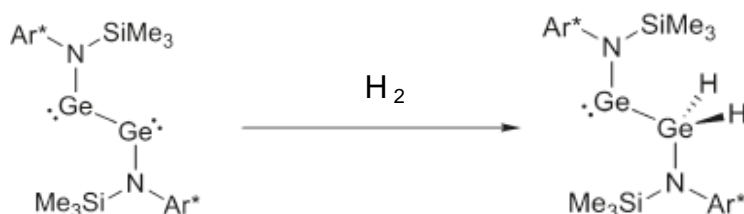
## Reaction Pathways for Activation of Small Molecules by Amido Substituted Ditetrylnes $R_2N-EE-NR_2$ (E = Si - Sn)

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Recent experimental studies have shown that the hydrogenation of digermynes  $RGeGeR$  where R is an amide group proceeds in an unusual way where the product of the reaction is only the 1,1-dihydrogenated compound [1]. Neither the 1,2-dihydrogenated isomer nor the tetrahydrogenated product was experimentally found. In this contribution we report about the reaction pathways for hydrogenation of  $R_2N-EE-NR_2$  (E = Si - Sn). We also calculated the reaction course for the addition of  $CO_2$  to  $R_2N-EE-NR_2$ .



### References

1. J. Li, C. Schenck, C. Goedecke, G. Frenking and C. Jones, *Journal of the American Chemical Society*, 2011, 133, 18622-18625.