
Students' Annual Seminar

Lewis Acid Stabilized Germanium(II) Compounds

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In recent years, the stabilization and isolation of compounds involving low-valent and low-coordination centres of p-block elements at ambient conditions are of great interest to synthetic chemists in view of their reactivity studies and catalytic applications.^[1] It has been realized that, coordination of Lewis bases to low-valent and low-coordinate center support to stabilize these unprecedented class of compounds at room temperature.^[2] In general, low-valent centre has lone pair of electron(s) that can coordinate with suitable acceptors-Lewis acids.^[3] Here we would like to use Lewis Acid instead of Lewis Base for the stabilization of compounds involving heavier main group elements. In particular, in this presentation we would like to discuss about the stabilization of Germanium(II)-dichloride using $\text{Fe}(\text{CO})_4$ Lewis acid fragments.

References:

[1] a) M. Asay, C. Jones, M. Driess, Chem. Rev. 2011, 111, 354-396; b) P. P. Power, Nature 2010, 463, 171-177.

[2] Y. Wang, G.H. Robinson, Inorg.Chem. 2011, 50, 12326-1233.

[3] D. Bourissou, O. Guerret, F. P. Gabbaï, G. Bertrand, Chem. Rev.2000, 100, 39-91.

Thursday, Dec 10th 2015

4:30 PM (Tea/Coffee at 3:45 PM)

Seminar Hall, TCIS