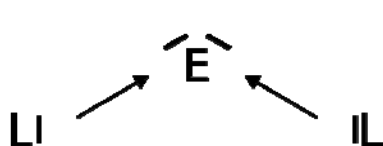


# Main Group Complexes with Unusual Donor-Acceptor Bonds

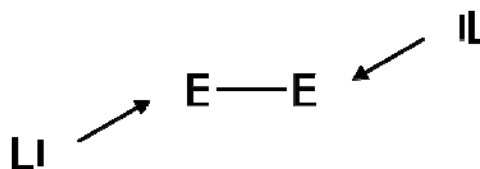
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The lecture focuses on donor-acceptor complexes of main-group elements where two strong  $\sigma$  donor ligands bind to a single center E in  $L \rightarrow E \leftarrow L$  [1] or to a diatomic species  $E_2$  in  $L \rightarrow E_2 \leftarrow L$ . [2]



E = C, BH, N<sup>+</sup>, Si



E = Group 13, 14, 15 atoms

[1] (a) G. Frenking, R. Tonner, *Pure Appl. Chem.* **81**, 597 (2009). (b) K.C. Mondal, H. W. Roesky, F. Klinke, M. C. Schwarzer, G. Frenking, B. Niepötter, H. Wolf, R. Herbst-Irmer, D. Stalke, *Angew. Chem.* **125**, 3036 (2013)

[2] (a) G. Frenking, N. Holzmann, *Science* **336**, 1394 (2012). (b) N. Holzmann, D. Dange, C. Jones, G. Frenking, *Angew. Chem.* **125**, 3078 (2013).