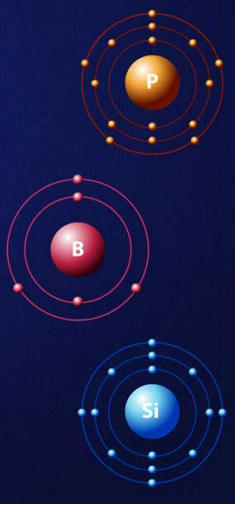
PremC Conferences, Events & Workshops

PBSi 2017

International Conference On Phosphorus, Boron and Silicon

July 3-5, 2017 | Paris



Frustrated Lewis Pair Chemistry: Principles and Some Recent Developments

PROF. GERHARD ERKER
Universität Münster, Germany

Frustrated Lewis pair (FLP) chemistry has taken a steep development in the recent years. The combination of non-quenched bulky Lewis bases and acids – intra- or intermolecular – has led to the disclosure of a variety of specific cooperative reactions. In this talk the principles of FLP chemistry are briefly discussed with the aid of selected examples and then some new recent developments will be presented. In most of these cases boron Lewis acid components are involved in combination with a variety of Lewis bases, including bulky phosphanes. A number of specific main group element reactions are utilized for the preparation of novel FLP systems, among them 1,1-carboboration and even a 1,1-hydroboration reaction.

Review: "Frustrated Lewis Pair Chemistry: Development and Perspectives", D. W. Stephan, G. Erker, Angew. Chem. Int. Ed. 2015, 54, 6400-6441 (doi: 10.1002/anie.201409800).