**Literature Object: Applications of Frustrated Lewis Pairs (FLPs)**

***Before the next class meeting***

Please download and look over the following paper, and answer the guiding questions below. A PDF of this paper may be found on the course Moodle page. Please bring your written responses to the next classroom discussion.

***NOTE*** - It is not necessary for you to read and understand every word/concept discussed in this paper. Use the guiding questions to help you focus on relevant information for our purposes.

Jupp, A.R., Stephan, D. W. “New Directions for Frustrated Lewis Pair Chemistry” *Trends in Chemistry* **2019**, *1*(1), 35-48. [ DOI: [10.1016/j.trechm.2019.01.006](http://dx.doi.org/10.1016/j.trechm.2019.01.006) ]

1. Hydrogenation is described as an application of the FLP systems described. Why are hydrogenations important to the chemical industry? How might you evaluate the performance of a hydrogenation catalyst?
2. Look through the listed examples of catalytic reactions that may employ FLPs. Which is most interesting to you? Why?
3. Write a balanced chemical reaction for the overall transformation you chose in 2.
4. For the FLP and application you chose in 2, identify the Lewis acid and base components. Comment on the relative steric bulk of each component.
5. What questions did this paper answer or raise for you? What would you like to know more about?

***During the class meeting***

Prepare your written responses to the questions above in a format that can be seen (and is legible) at your small group table. If necessary, email or upload a copy to your instructor to print. I’m happy to print anything in color if it is helpful. Plan to spend 2-3 minutes talking to the class about your responses to the questions above. This can be informal, and does not need to be rehearsed.