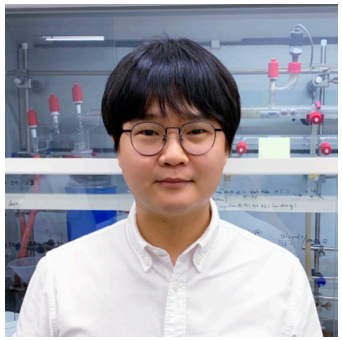
Day 6: Elementary Reactions III

TODAY'S TOPICS

- 1,1-migratory insertion
- α-elimination
- 1,2-migratory insertion
- β-elimination
- transmetalation

CHEMIST OF THE DAY



name?
institution
known for?

QUOTE OF THE DAY

"Nothing in life is to be feared, it is only to be understood. Now is the time to understand more, so that we may fear less."

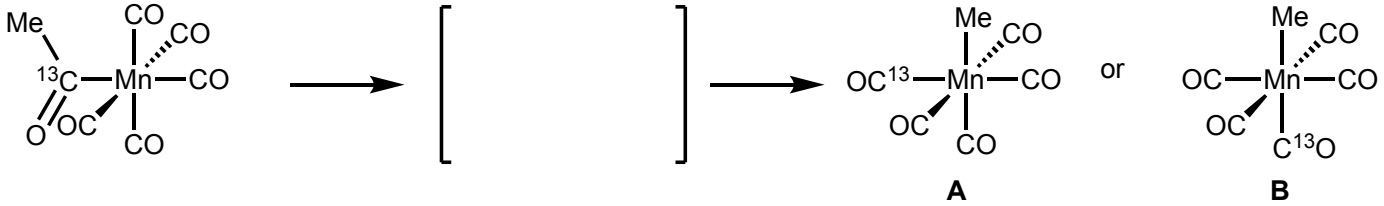
- Marie Curie

READING

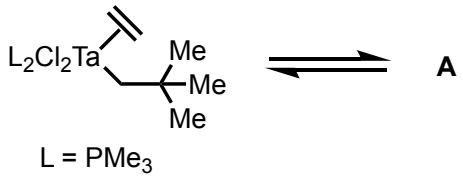
Hartwig: Ch. 3.2, 8–9, 19.4
Crabtree: Ch. 7

PROBLEMS OF THE DAY

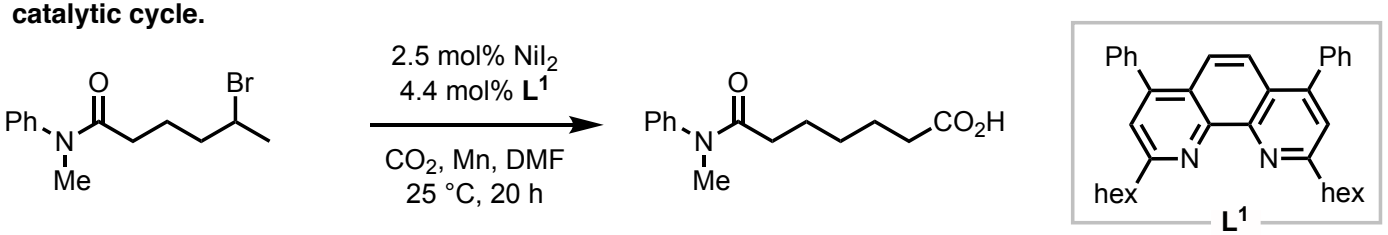
#1 Consider the following manganese complex. **Propose the intermediate and product (A or B).**



#2 In solution in C_6D_6, the following tantalum complex is in equilibrium with a tautomeric form, **A**. **Predict the structure of A and propose a mechanism to form it.**



#3 Consider the following transformation. Using the elementary steps covered so far, **propose a plausible catalytic cycle.**



#4 The following iron-catalyzed cross-coupling reaction does not work without LiNMeEt. **Propose two possible roles of LiNMeEt in facilitating transmetalation.**