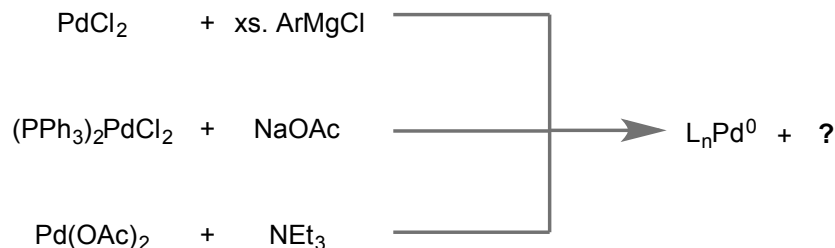


TODAY'S TOPICS

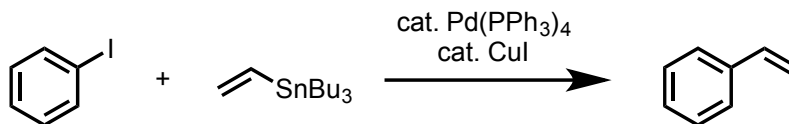
- Canonical catalytic cycles
- Classical Name reactions
- Mechanisms
- History

PROBLEMS OF THE DAY

#1 Consider the following processes for active catalyst formation below and **provide the mechanism of generation of Pd(0).**

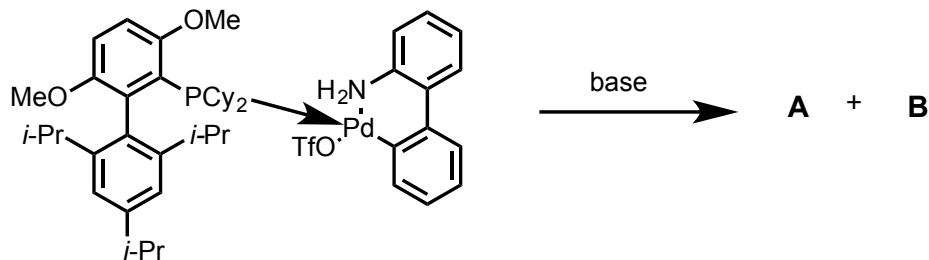


#2 In many Stille couplings, copper additives are found to promote the rate and efficiency of desired C–C bond formation. **Provide an explanation of the roles of copper(I) iodide in the reaction below.**



#3 Buchwald's biaryl phosphine ligands have played a significant role in advancing the field of cross-coupling.

A. Provide the products of the reaction below and the overall electron count of A.



B. Rationalize how this series of ligands would accelerate key step(s) in a standard cross-coupling reaction.

CHEMIST OF THE DAY



name?
known for?

QUOTE OF THE DAY

"Wheresoever you go, go with all your heart."

- Confucius

READING

Hartwig: Ch. 19