Chem 51LC Wk 2
Announcements

● Pre-lab completion rules in effect starting this week!
● Must be enrolled to attend lab.
● TAs will enroll you in turnitin with UCI email address.
● For next week, Wittig: 2-week experiment. 1st week no Sapling pre-lab.
Waste Disposal Reminders

Chemicals - waste containers!
- Liquid or solid waste containers
- TLC plates in waste container, NOT TRASH OR GLASS WASTE

Glass things - glass waste!
- TLC spotters, melting point capillaries, broken glassware - GLASS WASTE NOT TRASH

What goes in trash?
- Paper towels, gloves, plastic pipettes (expel chemicals first!), plastic wrap, parafilm, weighing papers (scrape/rinse off chemical first)
Fire Alarm Procedures

We had a fire alarm last week (not our fault!), so let’s review what to do.

- If it is safe to do so (no visible smoke or fire), remove items from heat, unplug heat sources, and close hood sashes.
- Evacuate building using stairs.
- Meet your TA in Aldrich park. Wait to see if we will be able to enter the building.

When in doubt, ask!
Your Questions
Additional Questions?
Quick EAS Overview

Experimentally determine relative activating group ability of following groups using electrophilic aromatic substitution with bromine. More Br substituted for H = more activating.

Substrates:

General reaction:
Problem of the Week

Which is more activating and why?

“Because that’s the order in the textbook” NOT an acceptable answer!

Hard question, so have some hints!

1) Remember donation of electron density
2) Electronegativity is important here!

(Hyperconjugation can be helpful in understanding methyl group in different situations, but is not essential here.)
A student decides to use the same experiment design to test the relative activating ability of the two disubstituted benzenes shown above. He conducts the experiment and finds both substrates gave dibrominated products. Choose the correct conclusion and rationale (one from each column, enter conclusion than rationale, example EV).

**Conclusion**
A) Methyl more activating than amide.
B) Methyl less activating than amide.
C) Methyl equally activating as amide.
D) Relative activating ability cannot be determined from this experiment.

**Rationale**
W) Textbook and scientific literature list this order.
X) Both compounds added maximum Br atoms possible.
Y) C is more electronegative than N.
Z) N is more electronegative than C.