PRE-LAB for the Ferrocene/Freidel Crafts Reaction

You will find the procedure for this lab on the website under ‘lab handouts’

The specifics for the prelab. Write in your lab notebook—photocopy and turn-in before you begin lab

You do not have to write a ‘purpose’ for this reaction—the reaction equation is considered the ‘purpose’. For the products of the reaction put both the mono and di acetylated ferrocene products.

Create a reagent table for this reaction.

--The table should include names of starting materials, mp/bp MW, moles and grams to be used and theoretical yield (in grams) of the mono and di products (assume a 100% yield for both the mono and di product). Also list the mp for the mono and di ferrocene products.

--Sketch the reaction set-up that you will be using.

Watch the Youtube video: http://www.youtube.com/watch?v=EytuRMS1154 which will be a guide to day 2 column chromatography.

Pre lab questions:

1) What type of the mechanism is occurring in this reaction?
2) Draw the structure of the ‘Electrophile’ in this reaction
3) Which reagents are water sensitive in this reaction?
4) What steps are you taking in the procedure to ensure that your reaction is water free?
5) You should expect to have in your final product mixture both mono & di acetylated ferrocene and some unreacted Ferrocene. When you TLC your product mixture what you do expect the relative Rf values of these 3 compounds to be?— predict the order from largest to smallest Rf values.