CHEM 450/450G HW #9

Reading: Chapter 18.7-18.10, 18.13, and 19.1-19.7

Hand in:

Q 19.4, 19.7 (3 points each)

P 18.26, 19.2 (3 points each)

XC: P19.13

Notes:

Be sure to include all plots, generated electronically, with axes labeled, including units. When a linear fit is performed, show the equation of best fit and the R^2 value.

P18.26: You should be able to calculate the time based on the analytic (i.e., not graphical) expression for [J](t). Plots should be done in excel or something similar (not hand-drawn), completely labeled with units. It would probably be most instructive to try to plot all three components on one set of axes, but only if the maxima are all on the same order of magnitude.

P19.2: Don't know which assumption to use, SSA or PE? Check the relative sizes of the different rate constants. If you have experimental data against which you can compare, then try *each approximation*, and see which is consistent with the experimental rate law. This might tell you something about the rate constants!

P19.13: Be sure to state any assumptions you make, especially with regard to approximations you use (SSA and PE).

Additional:

Q 18.3, 18.5, 18.10, 19.5

P 18.25, 19.5, 19.7, 19.18