

## Experiment 11 - Kinetics of Food Dyes

### Feedback Form

Complete this form and use it to assist you with *Prelab Quiz 11*. Do not hand in the feedback form to your TA.

- A. In the space below, prepare data tables to record data for your simulation experiments: volumes and initial concentrations of dye and bleach in solutions you prepared in both experiments (Step 1 and 3),  $k'$  values (including units), and Beer's Law slope. Record all this data while you perform the experiments. Explain your experiments in a short paragraph.

- B. Answer the following questions using your kinetic traces.

1. What is the reaction order in dye ( $m$ ) and in bleach ( $n$ )? What is the basis for your conclusions?
2. Calculate the rate constant ( $k$ ) for the reaction of Yellow 6 with bleach with 2 significant figures, for the two experiments you have conducted (Step 1 and 3).

Formulate the rate law for this reaction.