

## Lab G - Metabolic Pathways of Algae

In this lab, you will analyze the effects of an experimental variable on the rate of photosynthesis or cellular respiration in algae by using a paired analysis. You will do this using algae beads, which are groups of algal cells formed into small spheres. You will observe these metabolic processes using a color changing pH indicator solution. You will formulate a prediction about one of these pathways and use calorimeter to test your prediction.

### Concepts:

- Proposing a testable hypothesis
- Designing an experiment with controls
- Understanding and interpreting p-values using a paired analysis

### Skills:

- Using a pipetter and transfer pipette to prepare solutions
- Using a computer interface with a colorimeter to collect data
- Calculating dilution factors
- Analyzing the results of a paired analysis