



# Millican

## Lab #3

Robert Millikan is credited with determining the charge of the electron through his famous Oil Drop Experiment. Each time the experiment was performed it determined the charge on the drop of oil. However, since each drop had an undetermined number of excess electrons the experiment did not directly find the electron charge. In this lab you will have a chance to determine the mass of a single item through a process similar to that by which Millikan determined the charge on a single electron.

**Materials:**

25 film canisters with identical "things" in them                      balance

**Procedure:**

Self designed. You may do anything except open the canisters.

**Calculations:**

- Determine the mass of an individual "item" inside the canisters.
- Determine the number of "items" in each canister.
- Determine the mass of an average canister.