

Gas Chromatography Lab

You will be assigned an unknown solution and an analyte. You will also be instructed on instrument use when you have your solution.

Run the unknown solution on the gas chromatograph. Record the results.

Weigh a small amount of solution. Add a fair amount ($\sim 1/3$ the solution volume) of analyte to your solution. Weigh the mixture.

Injecting the same volume of sample as in the first separation, run the mixture on the gas chromatograph. Check that one of the peak areas increased. If it did not, run your mixture again.

You have just done a standard addition experiment. Use the mathematical method of standard addition to report the mass% of analyte in your sample.

Beware: these samples are volatile. Keep them tightly capped when not in use.