

**Mass Spectrometry**

We are using a state-of-the-art laser that gives very short laser pulses (flashes) that have different colors included in it to differentiate very similar compounds in a very short period of time. In order to do this, we manipulate laser beam using a special apparatus that can change how different colors arrive to the sample relative to one another. This way we can manipulate the laser-matter interaction and causes chemical compounds to breaks apart differently and the patterns of different pieces help us to identify chemical compounds that otherwise extremely difficult.

-Tissa Gunaratne