Enhancing student understanding by developing an animation of the dynamic process showing how polar and nonpolar molecules are physically separated on a gas

chromatograph column.



How I Made A Chemistry Animation





# Animating for dummies...

- Screen capturing software for PC/Mac
- Commonly used to capture powerpoint presentations and video tutorials
- Features includes visual properties (animation) of media files added

Easy to use for beginner without all the bells and whistles



# Where the heck do I begin??

- Graphics I am not an artist...
- Use of images (repository? Google, of course), all CC BY 3.0
- Research what others have done

Do not make it too elaborate (KISS)

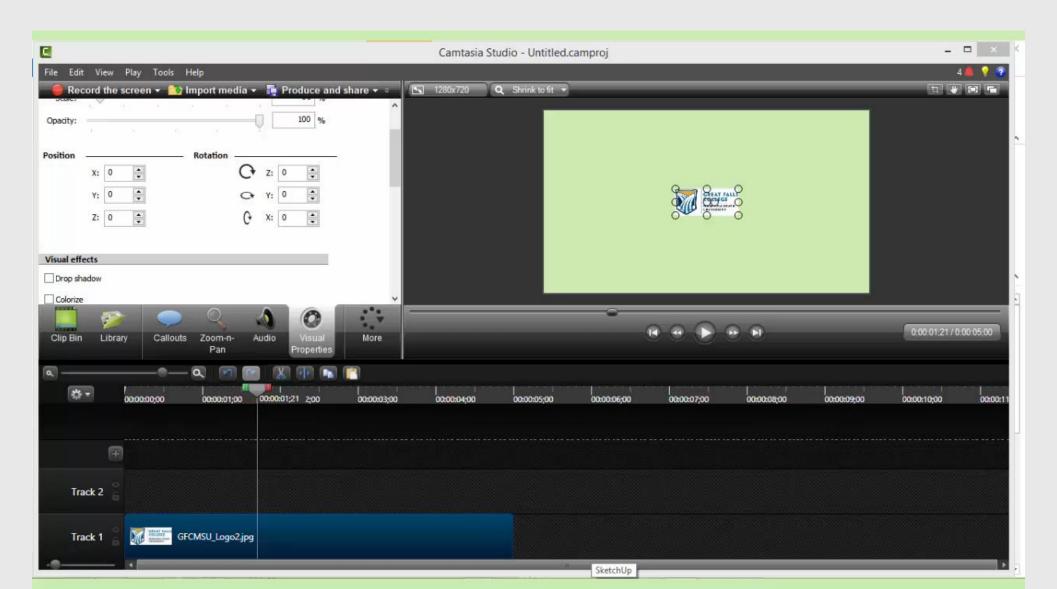
### What will the animation show?

- Components/makeup of gas chromatography (GC) instrument
- Molecules (polar & nonpolar) start in the column together
- Molecules move down the column at different rates (based on degree of interaction)

## Using Camtasia for animation

- Objects can be moved in the X, Y, or Z axis
- Molecules shown in both large/small scale
- Challenge: Matching up position/timing of objects between these two scales

#### Camtasia in action



# **Gas Chromatography**

https://www.youtube.com/watch?feature=player e mbedded&v=g1W7cZDad10

# Areas for further improvement

- Background music (feels like a silent movie)
- Add narration for explanation of what is being shown
- Make more elaborate animation using dedicated software (i.e. Adobe AfterEffects)