Yasmin Mazloom
Flow Visualization Fall 2015

For the third team project our group decided to work with the high-speed camera. I was working with my two teammates Vincent Staverosky and Janelle Montoya. My intention was to capture moments that human eyes do not notice while looking at the phenomenon but high-speed camera captures it.

For this project we had a glass filled with the mixture of water and dish soap with the ratio of 1-cup dish soup and 6-cups water. We also added ½ cup of sugar to increase the stability and thickness of bubbles. We made a bubble on top of the glass and then tried to set camera's focus on the center of the bubble.

In order to capture the best quality video possible we were playing with light setting for long time. At the end we used 3 fluorescent light each had 40 watts of power and 2 tungsten lights each 150 watts. All the lights were about 15 to 30 cm farther from the glass and around 40-50 cm from the camera lens. Our camera was set for 1000 frames per second and 1.00:1 zoom. Then I started releasing water drops on the film. The water drops were passing through the film and getting inside the glass. This phenomenon was not visible with eyes but looking at the film that I recorded with high-speed camera reveals how the water drop is passing the film, without breaking it down (figure 1.). The focal length was 15" and camera's f-stop was on 2 while documenting this phenomenon.

In post production the only thing I changed was creating a mask and cover some of the background. I was trying to remove some of the distracting details from the background; biggest distraction was seeing the fluorescent light in the background.

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My video looks nice in general. The only thing I would change next time is the lighting. It was really hard to get the light right and beside all the lights hat we were using out scene was not light enough and the dark blue tone of the dish soup is because of the lack of light.

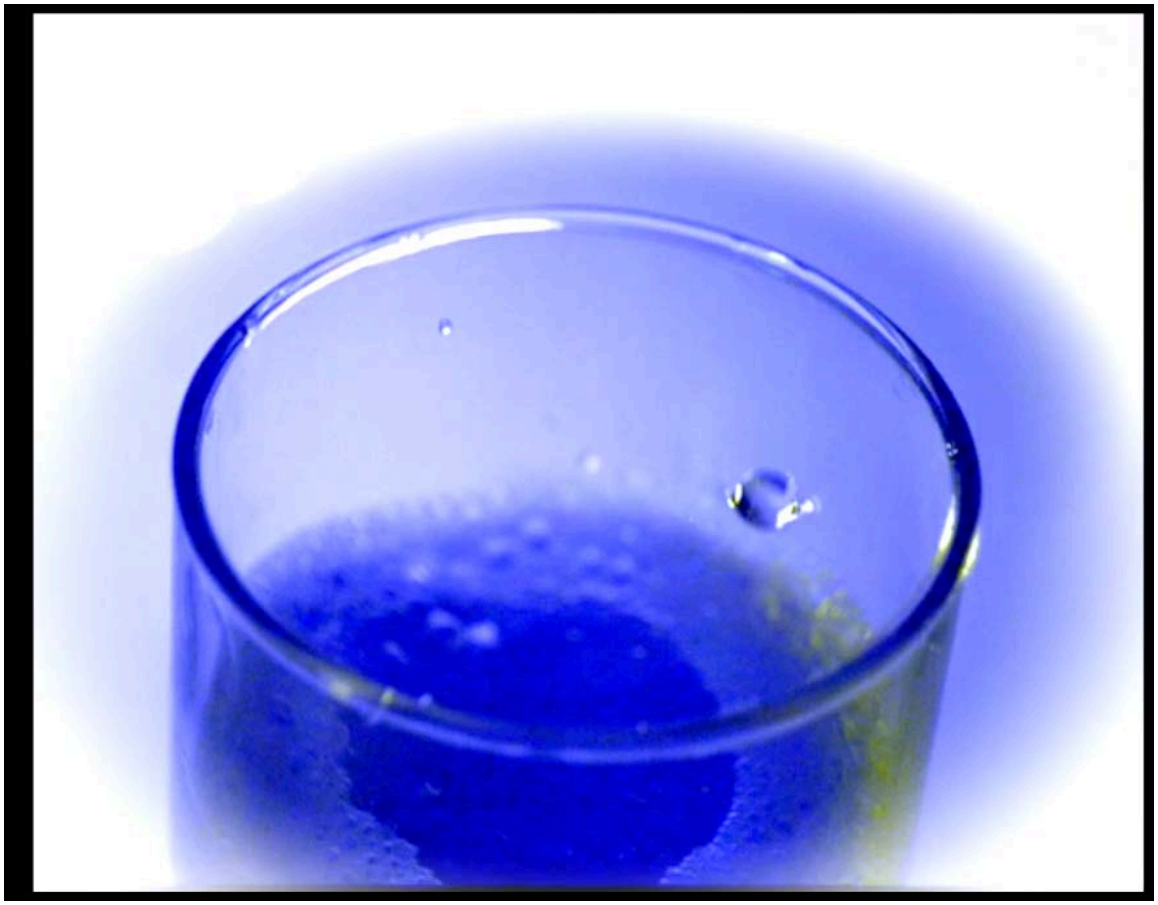

Figure 1. Still shot of the video while a water drop is passing through the film