

Team Third Project Report

Sung Moon (with help of Cyron, Galen, Hanwen, and Kevin) | MCEN 4151 | 2018-05-05

In our third team image assignment, Team Third project, the purpose was to get together with your team to take and help to take a picture of fluids of our choice that clearly exhibits both aesthetics and phenomena that is being experimented. The Team Third project allowed the students to expand their artistically developed interests and physics knowledges furthermore than the any other projects by adding more hands on deck. For my project, my team and I came together to think of cool fluid tricks to perform using fog machine and decided to just mess around with the fog machine and laser sheet. As a novice to the photographic field, my goal in this project was to have a picture that vividly demonstrates what is going on in the picture and some aesthetical meaning. With the image itself, its intent was to explicitly illustrate the fog and laser mechanics. Our team, Cyron, Galen, Hanwen, and Kevin, came all together to help each other. Hanwen specifically helped me with the camera because iPhone couldn't really vividly capture the moving fog.

In my team third image, we've used fluid-based fog machine instead of dry ice fogs. To explain briefly about the fluid-based fog machine's operation, most of the fluidbased fog machines operate by quickly heating up the fog fluid, a mixture of water and glycol. The expanded fluid vapor is pressed out of the machine from the nozzle.



Figure 1: Experimental Setup

As one can see in the Figure 1, we've put the fog machine onto the table because the fluid-based fog machine generates fog that tends to rise as it gets pressed out. We also wanted the laser sheet to disperse more widely. We also got a room in ITLL and blocked all of the lights so that the only light is the laser sheet. I like how the picture has unexpected colors to it. I also like the clear view of the fog generated by the machine. However, I didn't like how it really couldn't show 3D view. The circular laser sheet made the fogs more fascinating when we were looking at it without the camera.

From the original image, I've made very small changes. What I decided to do was to just crop and save as png file in Photoshop. As a beginner in camera world, I didn't have any intricate camera skills to film my motion blurs caused my fog movement, so I borrowed Hanwen's camera.

Citation

Fog Effects for Stage & Studio. (n.d.). Retrieved from http://www.limelightproductions.com/tips/how_fog_machines_work.html

Helmenstine, A. M. (n.d.). How Do Smoke Machines Work? Retrieved from <u>https://www.thoughtco.com/how-smoke-machines-work-607861</u>