

Impact Statement

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Inspiration through Transparency, 2022.

Digital art, 8 x 8 inches.

Westview High School, San Diego, CA

Unsung Hero: Katharine Burr Blodgett

My digital art drawing is of Katharine Burr Blodgett, who was the first woman to receive a PhD in physics from Cambridge University. She was also the first woman to work as a scientist for General Electric Laboratory in New York. She and her colleague developed “invisible glass” which renders glass 99% transmissive. The nonreflective coating is called Langmuir-Blodgett film. She also invented the color gauge which measure coatings on glass, worked on improvements to the light bulb, and issued eight patents. Her patent attorney father was killed in a home burglary before she was born. Her childhood with her mom and brother was split between Europe and New York. She was influenced by the mathematician Charlotte Angas Scott and physicists James Barnes. She dedicated her life to science and received many awards during her lifetime. I find inspiration in reading and learning about Ms. Blodgett. She was smart, a feminist, and very accomplished.

Glass and other useful objects are taken for granted. We often forget who to credit, especially if it is a woman of no prominence or fame. My digital rendering of Katharine Burr Blodgett shows her at her best – at work in her lab with her glass. Scientists, engineers, and mathematicians normally aren’t captured doing spectacular, fancy visual displays with their work because their work is often done in a quiet setting with a lot of time, thought, and effort going into problem solving. But we should be thankful for these pioneers in science and remember them in awe.

Drawing glass is very difficult! Even digitally this was difficult. I wanted to capture Ms. Blodgett at work with her invention in a meaningful way that gives her credit for the technology that she has given the world.

Sometimes artists are asked to “take risks” and not to “play it safe” to elicit a reaction from the audience. I didn’t choose to take a risk, I wanted to show Ms. Blodgett in a practical image doing what she loved best, which was to work in a lab doing science. I wanted to be as realistic as possible to show my respect for her work and contributions. Creating art doesn’t always have to be glamorous or have lots of bells and whistles.

Digital art is not as easy as most people think it is. But after practicing it does get easier and fun. It is cleaner than doing traditional art with drawing, painting etc. But that does not mean it requires less skill or time, or effort than traditional art. I enjoyed doing research on women in science who are unsung heroes. I would like to become a scientist and create something that is helpful to the world. Being recognized for my accomplishments would also be nice. I’m hoping that my creativity will help me in the science field. As an artist, I can imagine what my art should look like and then attempt to bring that to life in whatever medium I am using at the time. But for a scientist, I think it’s harder because the medium is not always the same and it does not do what you always want. What scientists envision may not ever come to fruition and not having

closure would be difficult to endure. But passing along the visions, hope, and research may still help bring something new in the future to other scientists who can continue the work.