

# Exhibition

Session: May 2017

IB Visual Arts SL



# Rationale

My artwork focuses on the regularly neglected yet beautiful chemistry that creates the world which we often photograph. At first glance, no viewer sees my artwork through the same lens that I approach the scenes I photograph. I chose to photograph a seemingly random series of natural occurrences because I want to show my audience the connectedness and importance of chemistry. I am attempting to bring awareness to the true power, prominence, and beauty of Chemistry through my exhibition.

In each piece in my exhibition there is a common or physically large example of a major reaction or concept in chemistry. I chose this style of presentation because I want to ensure that the photos involved chemistry that the general population would have encountered and pondered. Additionally, to capture and emphasize the subject of my art I used contrast and saturated colors. I feel as though my audience requires a clear subject to ensure that they understand the site of the phenomenon and the objects involved. These stylistic features allowed me to create understandable and, as a result, powerful artwork from which my audience can learn. For example, everybody has seen a rotting banana and likely wondered about the browning that naturally occurs, but few truly understand the chemical process. In that photo I not only chose a common and relatable reaction, but I saturated the colors to create contrast and emphasize the browning we have all observed. My artwork was all inspired by my IB HL Chemistry class and darkroom photography. As I have observed, IB pushes its students to see the connectedness between all subjects, no matter how different. It was not until I developed dark room photos that I saw the deep connection between the sciences and the arts. Additionally, I saw the complete potential of chemistry and its importance in every aspect of the world. These two realizations inspired me to intertwine knowledge and spread my appreciation for my favorite subject.

The strongest pictures with the most relatable examples are the largest because they help to attract an audience with a general idea. As the audience takes a closer look they recollect the questions they have ever had about various natural occurrences, questions my photos begin to answer. My exhibition style allows me to capture the attention of my audience and bring awareness to the chemistry they have seen in the world around them. (399 words)

# Secondary Succession



Medium:  
Digital Photography

Width: 15.24cm  
Height: 30.48cm

Secondary succession is the series of steps plant and animal life takes to return the environment to its original status. This picture was taken on a mountain that had recently burned down. Over the past few years the life has slowly begun to return to the hill sides and my audience has been able to witness the process. This picture not only acts as a perfect example of regeneration, but it provides the formal name for the chemical and biological process my viewers have observed first hand.



Medium:  
Digital Photography

Width: 15.24cm  
Height: 30.48cm

Hydrogen bonds are essential to a variety of biological and physical processes that allow life to persist on Earth. In this picture the bottle cap holds water that should be overflowing but forms a small bubble instead, a phenomenon that most do not understand. The title of this picture shows the scientific notation for a hydrogen bond between oxygen and hydrogen.



# Oxidation

Medium:  
Digital Photography

Width: 15.24cm  
Height: 30.48cm



Oxidation is a complicated chemical reaction that occurs when oxygen molecules form bonds with the species that is becoming oxidized. The most obvious, but unappreciated example is in the case of browning fruits. In this picture the chipping paint concrete helps to create contrast, thus emphasizing the chemical process. Additionally, this banana is discarded, similar to the way many treat the sciences that they have not had the privilege or curiosity to explore.



Medium:  
Digital Photography

Width: 15.24cm  
Height: 30.48cm

Nearly nobody knows that the process that creates rust ( $\text{Fe}_2\text{O}_3$ ) is the same one that causes fermentation in fruits. This picture not only provides my audience with an example of the connectedness of chemistry, but it provides them with the exact chemical formula for rust, a well known reaction.





Medium:  
Digital Photography

Width: 41.91cm  
Height: 27.94cm



The title is the standard, simple equation for photosynthesis. This picture shows a white wall, which represents chemistry, that many fail to see over. From one side it looks blank, boring, and impassible. With effort, however, it can be hopped and the other side is webbed with the branching fields of chemistry. There are segments with more beauty and color than others and there are still unexplored white holes, but the wall extends indefinitely in either direction and our knowledge continues to spread over it. The title shows how life can change something relatively useless into something of great importance and power (carbon dioxide into sugar)

# Newton's 3rd Law

Medium:  
Digital Photography

Width: 15.24cm  
Height: 30.48cm

Newton's 3rd law explains the idea of opposite and equal forces. Similar to the theme present in the "Secondary Succession" picture, this photo shows the transition from life to death and its opposite. The dead and living trees seem to act as a large scale example of the equilibrium that naturally occurs between the living and the dead.





# 404 nm



Medium:  
Digital Photography

Width: 41.91cm  
Height: 27.94cm

This picture shows the scene of a bright magenta flowers in full bloom. However, few understand that the coloration occurs because of the absorption spectra of the molecules within the pigments of the flower. This picture forces my audience to research the term "404 nm" only to find that it is the wavelength of the magenta light that is reflected to their eyes.