A Novel Approach to Maximizing the Efficiency of Carbon Capture

Hunsaker, Jaxon (School: Fremont High School)
Housel, Dillon (School: Fremont High School)

In this experiment, the effects of metallic bonding to the organic compound carbon monoxide were observed and analyzed. Basing our idea off the way in which carbon monoxide reacts with and bonds to blood in the body, specifically the heme group due to its strong attraction to the protoporphyrin ix compound which is the base for hemoglobin in the human body. We devised a way using different compounds, more easily accessible, to see if they would bind with the carbon monoxide emitted from an ATV. The data showed that some of the metallic compounds have a potential for binding to carbon monoxide, however we do believe that further testing would be needed to further back up our claim that carbon monoxide will bind with certain metallic compounds in a way that makes it possible to capture carbon monoxide that is being emitted from internal combustion engines found in motor vehicles.

Awards Won: