

Why I wrote the paper.

I wrote the technical paper and put it in the International Climate Journal for peer review. However, Dr. Huth said it was not a scientific paper. Then I put it in the International Chemical Engineering journal and within two weeks they started peer review. While under review there was a call for papers for the 2018 Climate Conference I spoke at last week. I submitted the whole paper to the conference instead of just an abstract. The conference committee PH D's saw the truth in science and invited me to present the findings. When the Chemical Engineering journal was done they said they would publish it but due to the Amazon Rain-forest part they said it would have a better impact in an environmental journal. I reformatted it and submitted it to the International Environmental Science and development journal. They performed a complete 2<sup>nd</sup> peer review and published it in 2018 Volume 9 number 4. <http://www.ijesd.org/show-106-1514-1.html> . When it was published, Dr. Andy Miller of the EPA's climate Change Group told me it is now my responsibility to bring down atmospheric CO<sub>2</sub>. I replied to him all I need is 15 to 20 years.

10 years ago, while I was working as a semiconductor lithography engineer I performed Pearson's regression on the atmospheric CO<sub>2</sub> rise vs. the emissions. The value I calculated was 0.87. Which is below the stringent 0.90 in semiconductors. If below 0.90 then we are told to find something that correlates better. One year ago, after retirement I was looking at how emissions have been flat since 2014 but the atmospheric CO<sub>2</sub> keeps going up. I made the graph in the presentation and sent it to several Climate Change scientists. They all said the minimum residence time had increased from 5 years to 500 years. Residence time is like when you have a plugged drain and the water is residing in the kitchen sink longer.

So, we must wait another 496 years for the 15% drop in emissions to influence the atmospheric CO<sub>2</sub>. When I drew that graph, I saw the atmosphere CO<sub>2</sub> value would be over 1000 ppm at the same atmospheric CO<sub>2</sub> slope. When I saw this, I knew something was very wrong. I back tracked with Pearson's regression to find the perfect correlation of 363 ppm for emissions. Then I made the model of the CO<sub>2</sub> in the atmosphere. This is the simplest of models and just like a kitchen sink. The inputs are emissions of CO<sub>2</sub> and the drain is photosynthesis. What we have is the level increasing and the residence time increasing. Like the earlier example it shows a clogged drain.

I received the Mauna loa data by latitude and easily saw the winds keep the CO<sub>2</sub> concentration constant over all the earth. The photosynthesis issue could be anywhere. Then I found the amazon rain forest. Started deforesting in 1950. The rise in CO<sub>2</sub> on the current slope started in 1957. 2 billion acres deforested and burned. Increase CO<sub>2</sub> causing the remaining plants to grow too fast and topple over. They call this the James Dean effect because they die before the fulfillment of their lives. The decay from the plants takes in oxygen and produces carbon dioxide. So much decay the amazon rain forest has switched from an oxygen producer to an oxygen sink. A carbon dioxide sink to a carbon dioxide producer. Temporary loss of CO<sub>2</sub> consumption from the 50 billion remaining acres at 30 tons annually. This is 1.5 tons of consumption annually which is 45 times our emissions at 32.2 million annual tons. Fortunately, the rain-forest will heal quickly once the deforestation and burning stops. The after 10 years or so the atmospheric CO<sub>2</sub> will be drained like a bathtub. In the short term we can help by planting 100 million trees and shrubs by the planting data in the presentation. When we do these things then the atmospheric CO<sub>2</sub> will come down to around 320 ppm within 20 years. If we do not do these things, then atmospheric CO<sub>2</sub> will never come down. Certainly, with more consumption it won't matter how much emissions we have and then it becomes a pollution issue, and everyone has a responsibility to minimize pollution.

Further truths in science I presented:

CO<sub>2</sub> does not freeze in the upper atmosphere. The pressure in the mesosphere is 1 millibar. At that pressure the freezing point of CO<sub>2</sub> is -100 C. The temperature in the mesosphere is -90 C.

The Ocean is not a sink for atmospheric CO<sub>2</sub>. The concentration of the ocean is 50 times the air concentration and things don't diffuse from low to high concentration. Also the diffusion distance of Atmospheric CO<sub>2</sub> is 1 cm/yr. Both prove there exist no flux. No driving force for Atmospheric CO<sub>2</sub> to enter the ocean. Recently I sent Dr. Mote at OSU an experiment with a wave tank that could be done to show this.

Additionally, you don't get a speaker badge and certificate for speaking unless you do that at a conference. I spoke for 20 minutes and then Q&A time. That started up with Dr. Daniel Gbujie, the IPCC representative standing up and saying this is great news. We can bring down CO<sub>2</sub> quickly. Then they discussed how to get this into the worldwide media for another 20 minutes.