

Class 2 - Air Pollution

Abbreviated Class Outline on Global Warming and Acid Rain

I. Global Warming

- **What is the Greenhouse Effect?**
- **Greenhouse effect leads to Climate change.**
- **What causes the Greenhouse Effect? (Greenhouse Gases, CO₂ predominantly.)**
- **What are the sources of CO₂? (Fossil Fuel burning, i.e., wood, coal, petroleum products like gasoline)**
- **Why worry about global warming?**
 - **Climate change**
 - **Cause sea level rise by melting polar ice caps; flood Ocean City**
 - **Cause changes in crop production; turn farms into desert**
- **How do we fix it?**
 - **Stop burning so much fossil fuel, by using alternative sources of energy (e.g., solar panels; wind power; public transportation; hydrogen fuel cell cars)**
 - **Stop cutting down trees (Deforestation).**

II Acid Rain

- **What is Acid Rain? pH < 5.6 (more acidic on pH scale)**
- **What causes it? SO₂ (coal Combustion) & Nitrogen Oxides (Nox) react with gases in the atmosphere to form acid compounds, which fall out in rain, snow, mist.**
- **Why worry about acid rain?**
 - **Destroys stone, paint, etc.**
 - **Kills fish**
 - **Kills trees**
 - **Hurts crop production**
 - **Causes human respiratory problems**
- **How do we fix it?**
 - **Reduce combustion of fossil fuels through use of alternative energy, etc.**