# **IPRO 331 - SPRING 08**

**Global Warming: Research and Community Outreach** 

### **Presentation Outline**

- Introduction to Global Warming
- Team Organization
- Summary of Subgroup Topics
- Differences from last semester
- Goals for this semester
- Accomplishments
- Problems faced
- Results/Feedback from outreach
- Conclusion / Future possibilities

## **Global Warming**

Definition Relevance Controversy

## Definition

The increase in the average temperature of the earth's surface and oceans



## Relevance?



Picture: The decreasing ice cover in the North Pole

## Controversy?

- Are we the cause?
- Is this *actually* happening?
- What are the proven effects?



## **Global Warming Subgroups**

#### **IPRO was divided into four subgroups:**

- Biofuels
- Carbon Dioxide
- Solar Energy
- Polar Ice Caps

#### Biofuels

#### **Highlights**

Fossil fuels produce
 Greenhouse gases

• Fossil fuels are Running out



Harshill Parikh – Leader, 4<sup>th</sup> yr. electrical engineering Thomas Kennedy – 4<sup>th</sup> yr. mechanical engineering

Biofuels as an alternative source of energy

#### **Carbon Dioxide**

#### **Highlights**

- Largest air pollutant of greenhouse gases
- Sources of carbon sinks

 Amber Juilfs - 3<sup>rd</sup> yr. Chemistry

 Suraj Chandrasekar - 4<sup>th</sup> yr. BME

 Ravi Inyegar - Leader, 4<sup>th</sup> yr. Biochemistry

• Future projections of carbon dioxide in the atmosphere

## Solar Energy

#### **Highlights**

- Possible way to reduce greenhouse gas emissions
- Case study on a solar smart home

Natalie Mikosz – Leader, 4<sup>th</sup> yr. Architecture Trevor Dickson – 4<sup>th</sup> yr. Architecture Lexie Manke – 4<sup>th</sup> yr. Architecture

Comparison with other eco-friendly solutions



#### Polar Icecaps

#### **Highlights**

- High sensitivity to temperature change
- Abundant evidence in reduction of ice



Yosra Shaaban – 2<sup>nd</sup> yr. Biology Rohan Amin – Leader, 3<sup>rd</sup> yr. MBB

 Global consequences on marine life, coastal cities, ocean levels

### Goals for the Semester

 Create four factual presentations pertaining to the four subtopics

- Broaden outreach spectrum to:
  - High Schools
  - Local Colleges
  - Community Centers

## Accomplishments

#### **2 outreach locations:**

#### Rotary Club of Chicago



#### **Biofuels**

#### University of Chicago



Solar Energy Polar Ice Caps

#### **Problems Faced**

 Improve upon rushed and overloaded presentations from last semester

Broadening the outreach audiences

### **Results From Outreach**

- Provided with great feedback and future contacts
- Audiences filled out evaluations and verbally expressed opinions

#### Main Points from the presentations:

- Material was organized and easily understood
- Presenters were educated and experienced in their subject matter

## Conclusion

#### **Semester Accomplishments:**

- Created 4 simple understandable presentations
- Made presentations to local audiences
- Printed business cards and brochures
- Produced a website with video footage
- Set a strong foundation for next semester

#### **Future Possibilities**

Enhance the completed presentations
Begin outreach efforts in the first few weeks

## Recap

- Introduction to Global Warming
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- Accomplishments
- Problems faced
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## Thank You!

