# 2017-2018 Topic Descriptions

## **Practice Problem 1 - Spread of Infectious Disease**

Estimations indicate that more than 52 million people fall ill from infectious diseases around the world each year. Seventeen million people die annually from these diseases. With the advent of affordable global travel, infectious diseases may spread rapidly over a large area across the globe. Vaccines and treatments are often ineffective or expensive to manufacture. How can the spread of infectious disease be controlled? How can the health of people around the world be safeguarded?

#### **Practice Problem 2 - Toxic Materials**

Toxic materials are everywhere: heavy metals in electronics, flame retardants in furniture and clothing, pesticides in our food, and harmful chemicals in plastics. PVC (polyvinyl chloride) products are an example of matter dangerous to health and environment. In the factory, at home, and in the trash, poisonous chemicals are linked to cancer and birth defects. Certain chemicals are known to be hazardous, yet current regulation systems allow them to continue to be brought into homes via many products. Even worse, information pertaining to health and environment damage is not available for most of these chemicals. How can we become better aware of the dangers associated with toxic wastes? What will happen if we increase our reliance on these materials

## **Qualifying Problem - Philanthrocapitalism**

Philanthrocapitalism is a form of philanthropy in which entrepreneurial ideas, practices, and wealth are used to tackle global challenges. As the divide between rich and poor increases around the world, the number of billionaires is growing. Some of the planet's wealthiest people have become philanthrocapitalists, pledging to invest time, energy, skills, ideas, and large amounts of money towards worthy causes. This may have a positive impact on the people, groups, and causes that are chosen for support, but there are questions about this form of philanthropy.

Will the efforts of philanthrocapitalists actually lead to deep, sustainable results? How will their causes be chosen? Do individual philanthrocapitalists have the expertise to address the world's most significant problems? Will this model of philanthropy present conflicts of interest as it influences the priorities, donations, or behaviors of average people? Does philanthrocapitalism transfer the power and responsibility of social change away from governments and charitable organizations to an elite few? How might philanthrocapitalism benefit or harm the generations of the future?

#### **Affiliate Bowl - Cloud Storage**

Cloud storage for commercial, private and public content is a growing phenomenon and is used by both public citizens and private corporations. Cloud storage provides a number of advantages: lower costs for usage, automatic backup and recovery systems, less maintenance than what is required presently, and personal computers do not need

to provide large amounts of data storage. From the negative aspect, people worry about the reliability and security. What would happen if corporations could not access their information stored on a cloud? If a cloud system is hacked, how is information secured? What if authentication and authorization systems fail? The safety of data depends on the third-party hosting companies. How should businesses protect their data and intellectual property when cloud storage means they've exchanged much of their ability to manage their data directly for ease of operation and convenience?

The 2018 International Conference topic will be announced in March 2018.