Plastics: Saint or Sinner? LIR Seminar Spring 2022 Moderator: Jessie Tropp

In this seminar, we'll explore different types of plastic, their effects on living things and the environment, and what the future is for plastics.

Plastics were originally developed as a substitute for ivory, to help save elephants from extinction. Now, we think of plastics as an environmental disaster and try to avoid their use. How did plastics go from being the hallmark of the modern world to being evil?

## Suggested topics:

- 1. The history of plastics
- 2. Types of plastics, their manufacture, and their uses
- 3. Are there "good" plastics?
- 4. Plastic in clothing
- 5. Plastics and ocean life
- 6. Plastic in packaging
- 7. Plastic trash and recycling
- 8. Microplastics
- 9. Health effects of plastics
- 10. Medical uses of plastic
- 11. Plastic and the petroleum industry
- 12. Global reduction in plastic use: is it possible?
- 13. Reducing plastic use in our personal lives: is it possible to live a plastic-free life?
- 14. The future of plastics.

Each participant will select a topic and prepare a 30 to 40-minute presentation. Participants are encouraged to choose from the suggested topics, but may propose an alternative.

## **Recommended Reading and Viewing:**

## Books:

Plastic, A Toxic Love Story, Susan Freinkel, 2011, Houghton Mifflin Harcourt (the "plastics are bad" viewpoint) (23 copies available through CW-MARS)

The Plastics Paradox, Dr. Chris DeArmitt FRSC FIMM (the "plastics are good" viewpoint)

Free to read online at:

https://plasticsparadox.com/wp-content/uploads/2021/05/Plastics-Paradox-Book-Double-Page-Web-Download.pdf

#### **Documentaries:**

## The Story of Plastic

This Emmy-winning documentary takes a sweeping look at the manmade crisis of plastic pollution.

https://www.youtube.com/watch?v=PCNanJNJ8JA

The Plastic Problem - A PBS NewsHour Documentary https://www.youtube.com/watch?v=1RDc2opwg0l

## Periodicals:

SCIENCE, Volume 373, Issue 6550, 2 Jul 2021 (Issue devoted to The Plastics Dilemma)

# https://www.science.org/toc/science/373/6550

(Moderator has a subscription and SCIENCE allows distribution of articles for educational purposes, pdfs will be emailed to class participants)

**Note:** The most current resources on specific topics are articles in well-respected periodicals such as Science, Scientific American, and investigative reports in major newspapers. Moderator has an extensive list.