

CHM4155 Term Paper 2020

Due date: your assignment must be submitted before **16h00 on December 22**

Upload your answers directly to the folder on Brightspace

LATE SUBMISSIONS WILL NOT BE GRADED (automatic grade = 0)

Pre-approved topics:

- polycarbonate of bisphenol A (PCBPA) and its replacements
- Teflon and other ultrahydrophobic polymers
- Polydimethylsiloxane (PDMS) and other silicones
- Polystyrene (PS) and other rigid foams
- Biodegradable polymers
- Biocompatible polymers
- Bakelite : the first synthetic polymer
- Self-repairing polymers
- Dendrimers
- OLEDs and other conducting polymers

Select a topic from the list above. If you would really like to explore another topic, please confirm your choice with me (by email) as soon as possible. In your paper, include the monomer and polymer structures. Discuss how the polymer is made, including the synthesis or mechanism. Discuss the physical properties of the material; how would it be classified? What are the applications? In short, in your paper, I want to see as much CHEMISTRY as possible: try to make connections between your topic and the concepts in the course.

Please note: Of course, you will need to use the online resources of the uOttawa library. The library gives you free access to many scientific texts and journals; the connection is automatic when you use the university's wifi. Here's how to connect off-campus: <https://biblio.uottawa.ca/en/use-library/connect-campus>

Some guidelines:

- Your paper (doubled-spaced) should be no shorter than 4 pages and no longer than 7 pages. I won't put a "word count" requirement, because you're old/mature enough now to not need that nonsense! Really, if you're doing a good job, then ~5 pages should work fine.
- Please illustrate your paper with images or schemes – just don't go overboard! All figures should have descriptive captions and be properly explained in the text.
- Be reasonable with your formatting choices: use a legible font (12 pt is good), decent margins (2 cm all around is fine), and double-spacing.
- Cite appropriately. You can use the [ACS citation style](#).
- Get someone to proofread your paper – I won't be too picky about spelling/grammar, but if I can't understand your text, I can't grade it effectively. Also, make sure any symbols/equations etc. print out correctly so that it isn't confusing.