

Organic Chemistry
Research Advisors For AY22

Jenn Guerard
Julia Pribyl Ham
Craig Whitaker



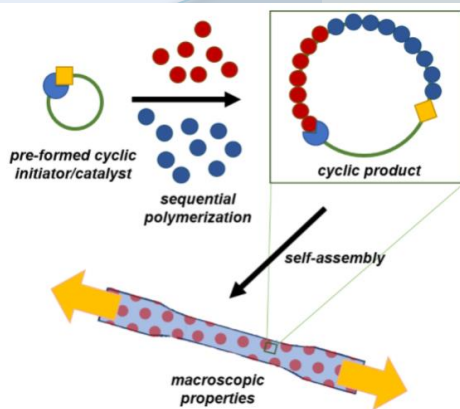
Professor Julia Pribyl Ham



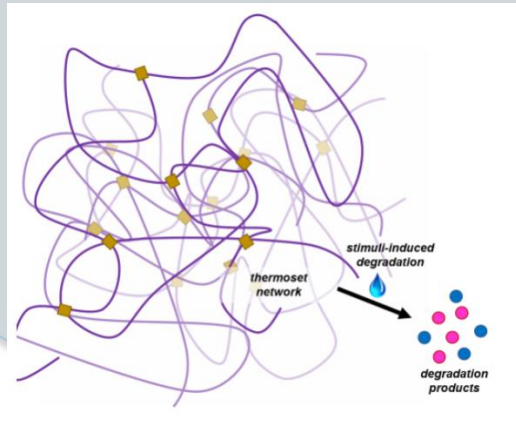
Key words:

- Organic synthesis
- Polymer synthesis
- Material testing

Research Areas:



Cyclic Polymers



Degradable Polymer Networks

Contact: jham@usna.edu

<https://sites.google.com/usna.edu/julia-pribyl-ham-polymer-group>

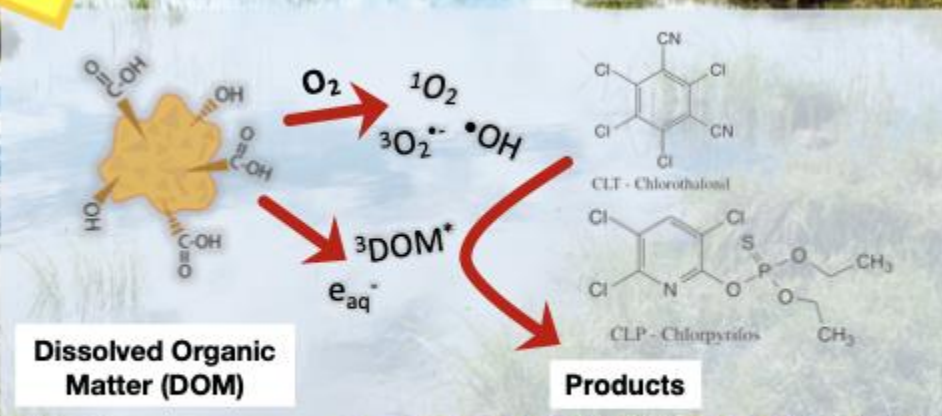
Fate and transformation of current-use pesticides in Arctic aquatic systems



Long range transport, deposition in the Arctic

- Where do contaminants end up in the environment?
- How do naturally occurring organic materials in an ecosystem influence contaminant fate and degradation?
- By what mechanisms do they degrade?

Learn organic photochem, analytics, kinetics, spectroscopy!



Dissolved Organic Matter (DOM)

Products



guerard@usna.edu



NSF CBET-1804271

Professor Craig Whitaker

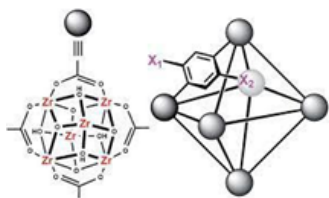
Overview:

My research areas focus on materials chemistry and polymer chemistry.

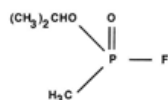
Projects:

- Destruction of Organophosphorus Nerve Agents using Metal-Organic Frameworks (MOFs) – DTRA (\$) / Army Chem. Bio. Center
- Synthesis of Organic Binders for Ballistic Missiles - ONR (\$) / MechE / Indian Head

Current students: Madison Jones ('21), Turner Morse ('21), Michelle Therianos ('21) and Crawford Smith ('21)



SARIN / GB NERVE AGENT
Isopropoxymethylphosphoryl Fluoride



Sintered PTFE / Boron

18.4% B 22.0% B

