

# *Considerations of Chemical Synthesis:*

Learning from Past Mistakes  
to Ensure a Safer Future

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# Historical Context

- Synthetic chemicals have a good and bad side
- Humans have used toxic chemicals without understanding impacts on health and the environment.
- In recent times, several toxic chemicals have been identified and regulated due to their harmful effects.

Examples of regulated toxic chemicals include:

- DDT
- PCB's
- BPA's
- Not out of the woods!
  - 6PPD-Q






# My Questions

- How to cope with inseparability from synthesized chemicals?
- Implications of current systems and use of chemicals?
- Are current frameworks ethical, equitable, and adequate?

**Method of Analysis: Qualitative Analysis Literature Review**



# Frameworks of Analysis

ETHICAL	ANTHROPOLOGICAL	ECOLOGICAL
<ul style="list-style-type: none"><li>● Rarely is someone free of culpability</li></ul>  <ul style="list-style-type: none"><li>○ Not reflective of reparation delegation</li></ul>	<ul style="list-style-type: none"><li>● Low-income and marginalized communities</li></ul>  <ul style="list-style-type: none"><li>○ Direct involvement from impacted communities</li></ul>	<ul style="list-style-type: none"><li>● Historical and cultural contexts affect priorities</li></ul>  <ul style="list-style-type: none"><li>○ All environmental agencies have their unique set of shortcomings</li><li>○ Not universally regulated</li></ul>

# The Globe

- Use in commercial settings without independent review
- High mobility or significant or widespread use
- We (humans) love trends and so does the market
- Rapidly changing circumstances can confound policy
- There are exceptions to policy





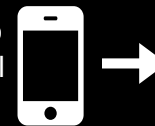
# Ok..Now What?

- Apply green chemistry principles to chemical synthesis/use
  - Investment in safer, sustainable technology
- Adjust frameworks
  - Add provisions for response to harmful chemicals
  - Stricter regulation and enforcement (particularly commercially)



# REFERENCES

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