

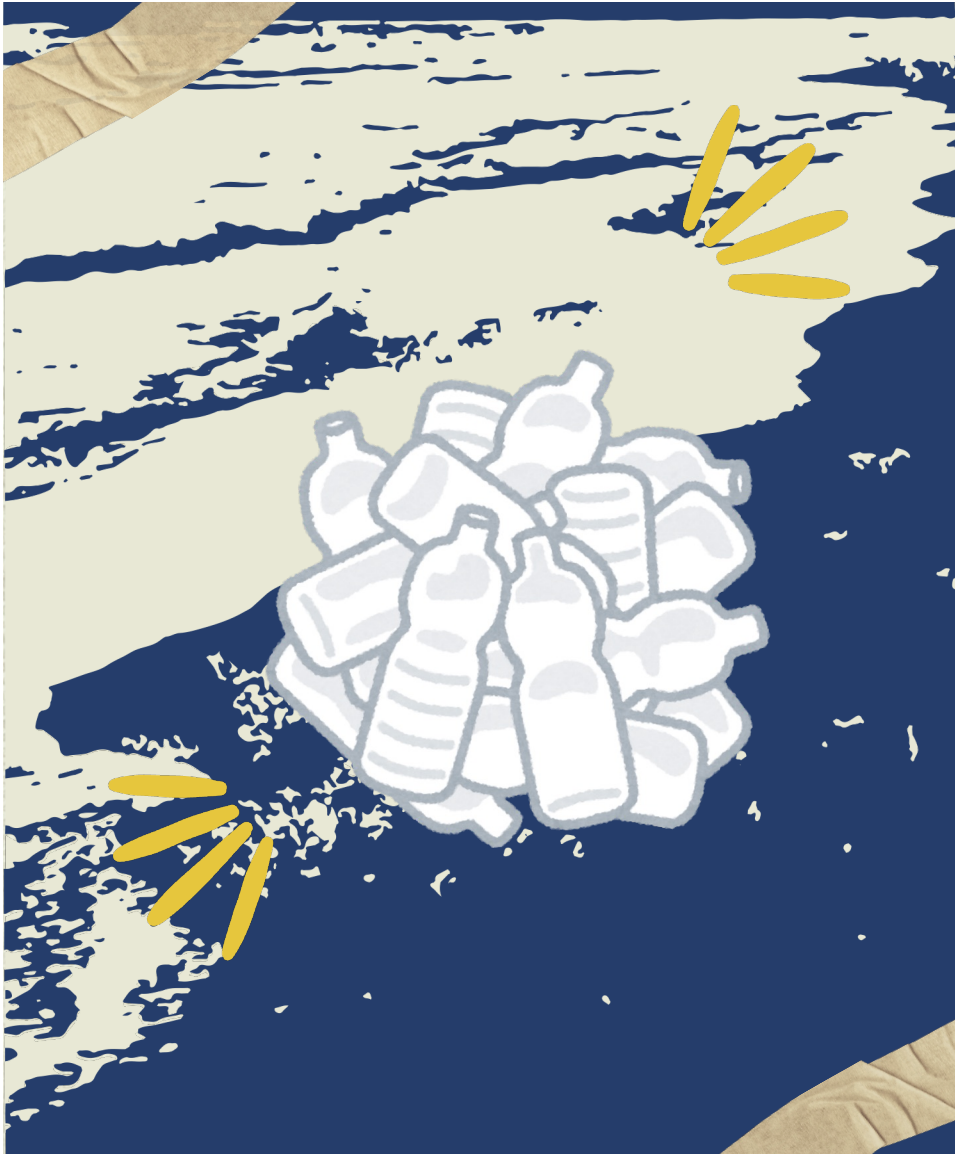
A Sustainable
Future

Degradation of microplastics

Star

Amponsah

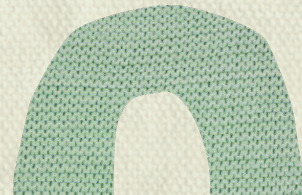




Introduction

On average humans consume 1,355 plastic particles daily.

There is an estimated 3-11 million metric tons of plastic on the ocean floor.

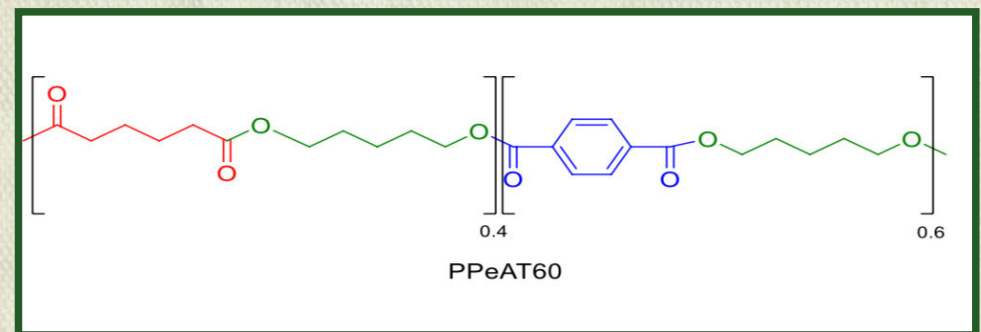
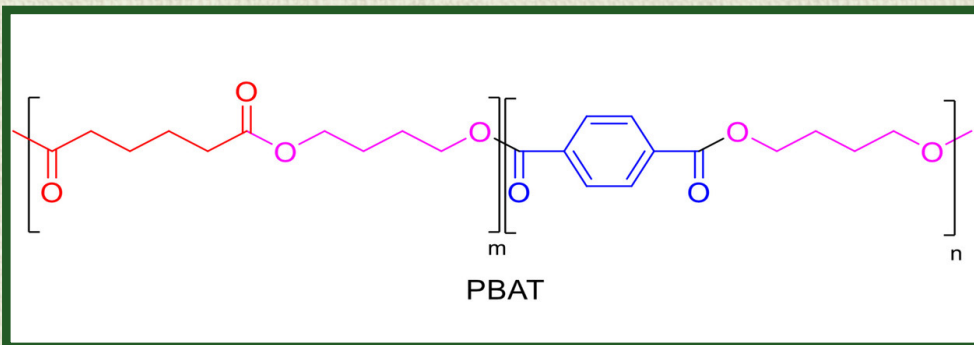


The problem

Currently the industry ' biodegradable alternative is PBAT (Polybutylene Adipate-co-Terephthalate)

- Time it needed for crystallization
- Sourced from petroleum
- Specific required conditions for degradation

Problems:



Current research

Currently we are working on the alternative PPeAT (Polypentylene Adipate-co-Terephthalate) which has improvements such as:

- thinner but stronger material
- ability to reconstruct quicker when heated to its melting point
- sourced from plants



My Part

I will be helping design and conduct the research of PPeAT's rate of degradation in saltwater.



A photograph of a snowy winter landscape. In the foreground, there is a snow-covered path leading towards a large, snow-covered evergreen tree. In the background, there are several buildings, possibly a farm or a small town, partially covered in snow. The sky is a pale, overcast blue. A large, dark blue oval with a white border is superimposed over the center of the image, containing the text "Thank You" in a white, elegant script font.

Thank You