



Environmental Impact of Cleaning Agents

*Can we do our weekly household clean-up
with less negative impact on the
environment?*

Think Bio-based Challenge 2018/19

The Authors

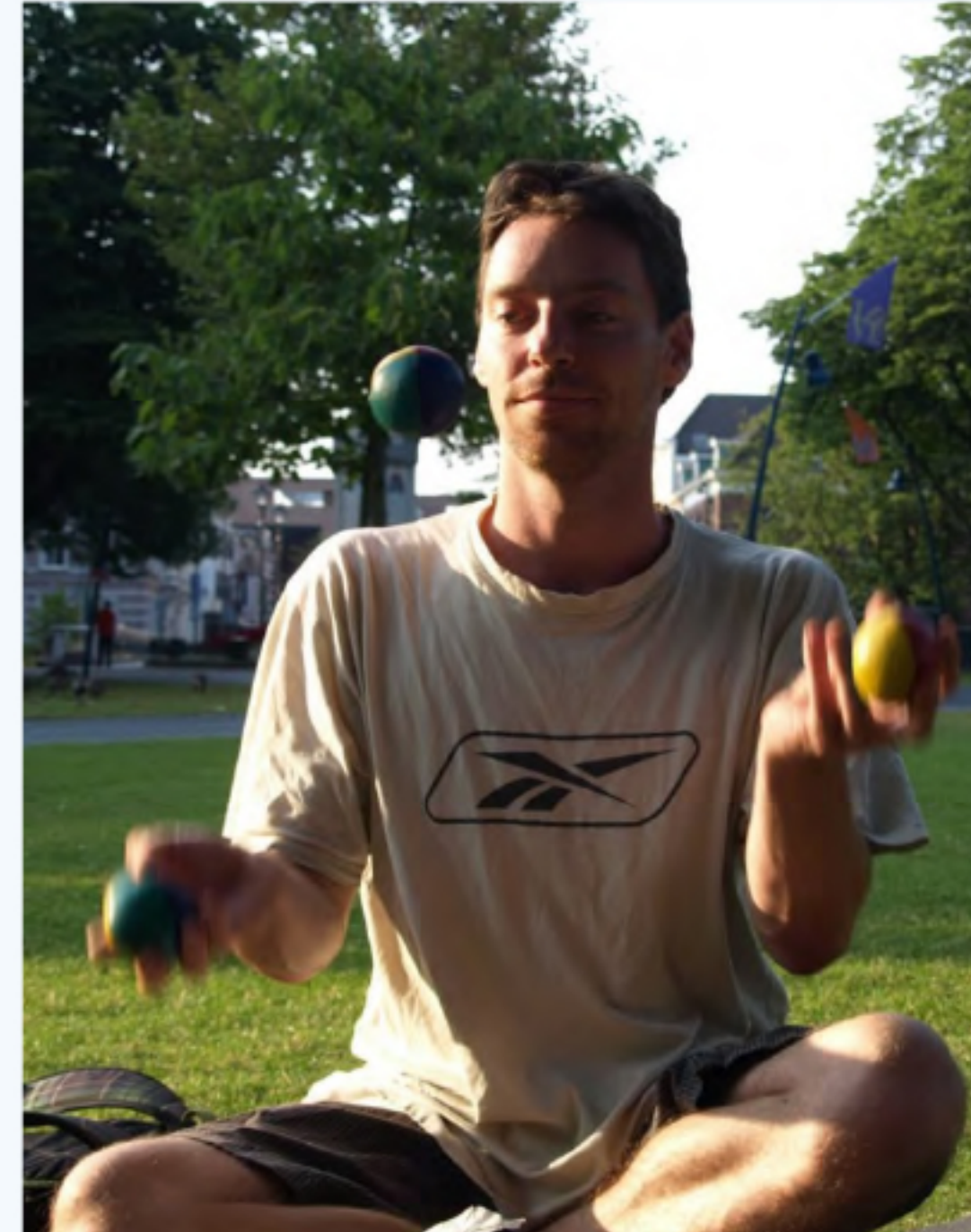
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Hello everyone and thank you for being here!

My name is Mr. Milieu and I will show you the difference between petroleum-based and bio-based cleaning products. I understand, cleaning is not the most fun activity... but it is very important for our health and well-being!

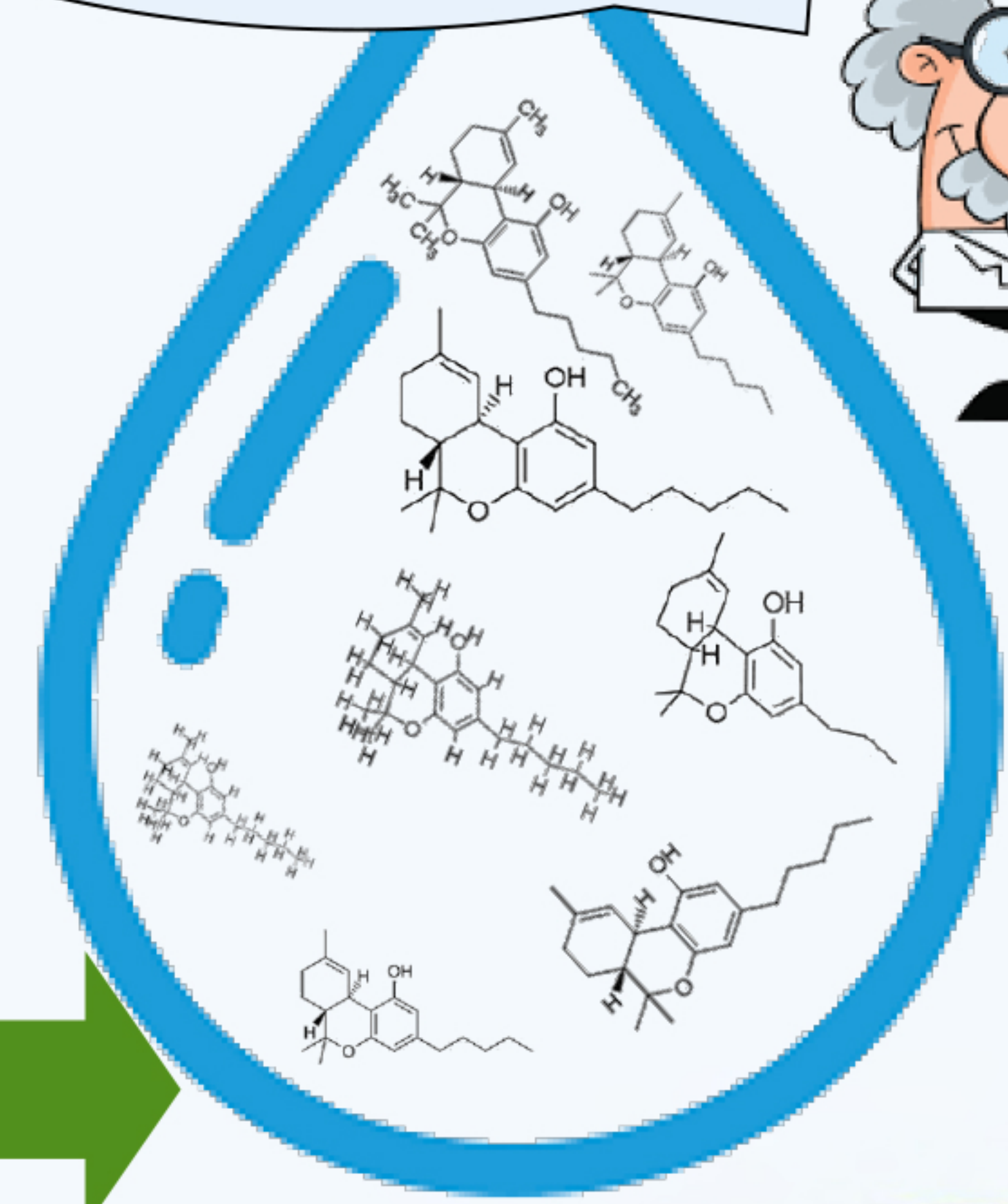
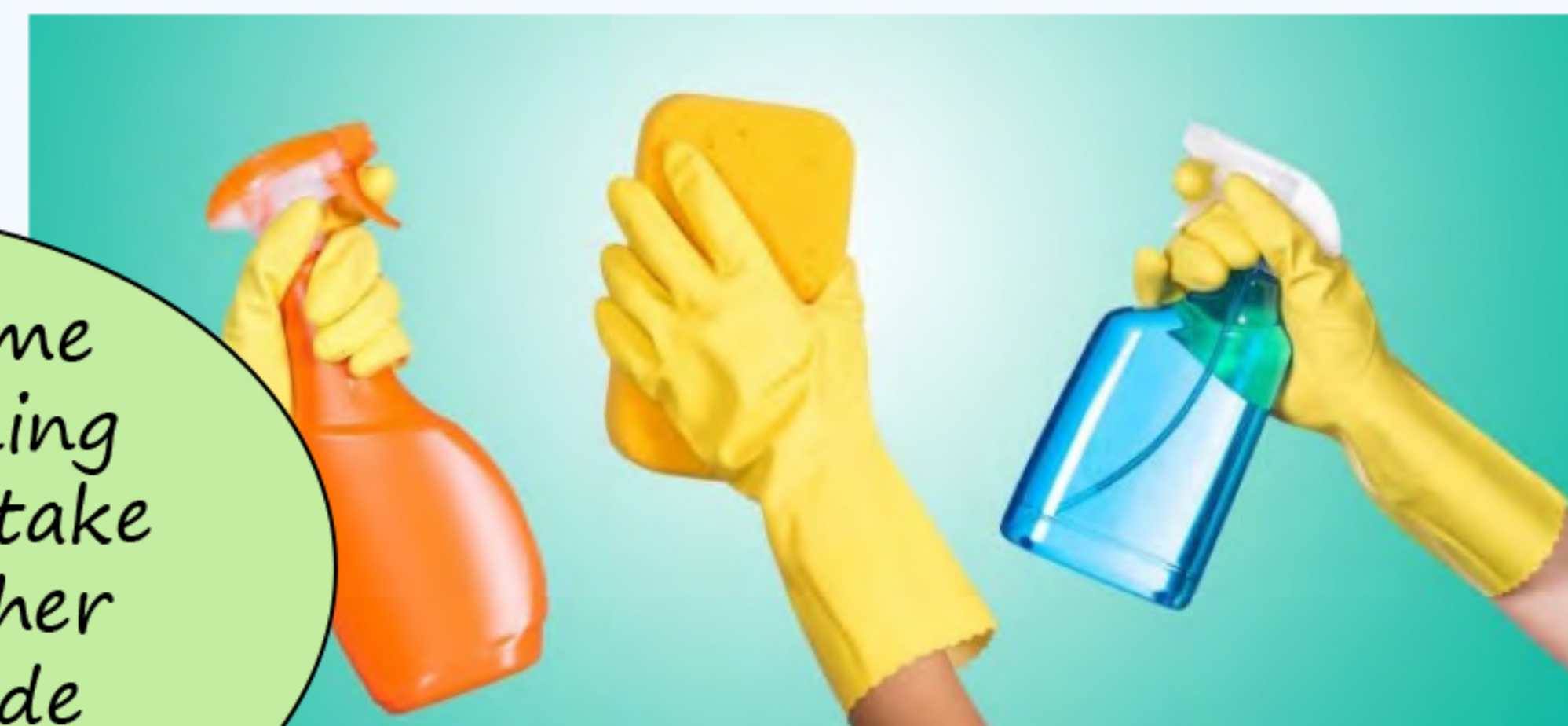
This house is VERY dirty! We should do something about it to not get sick.



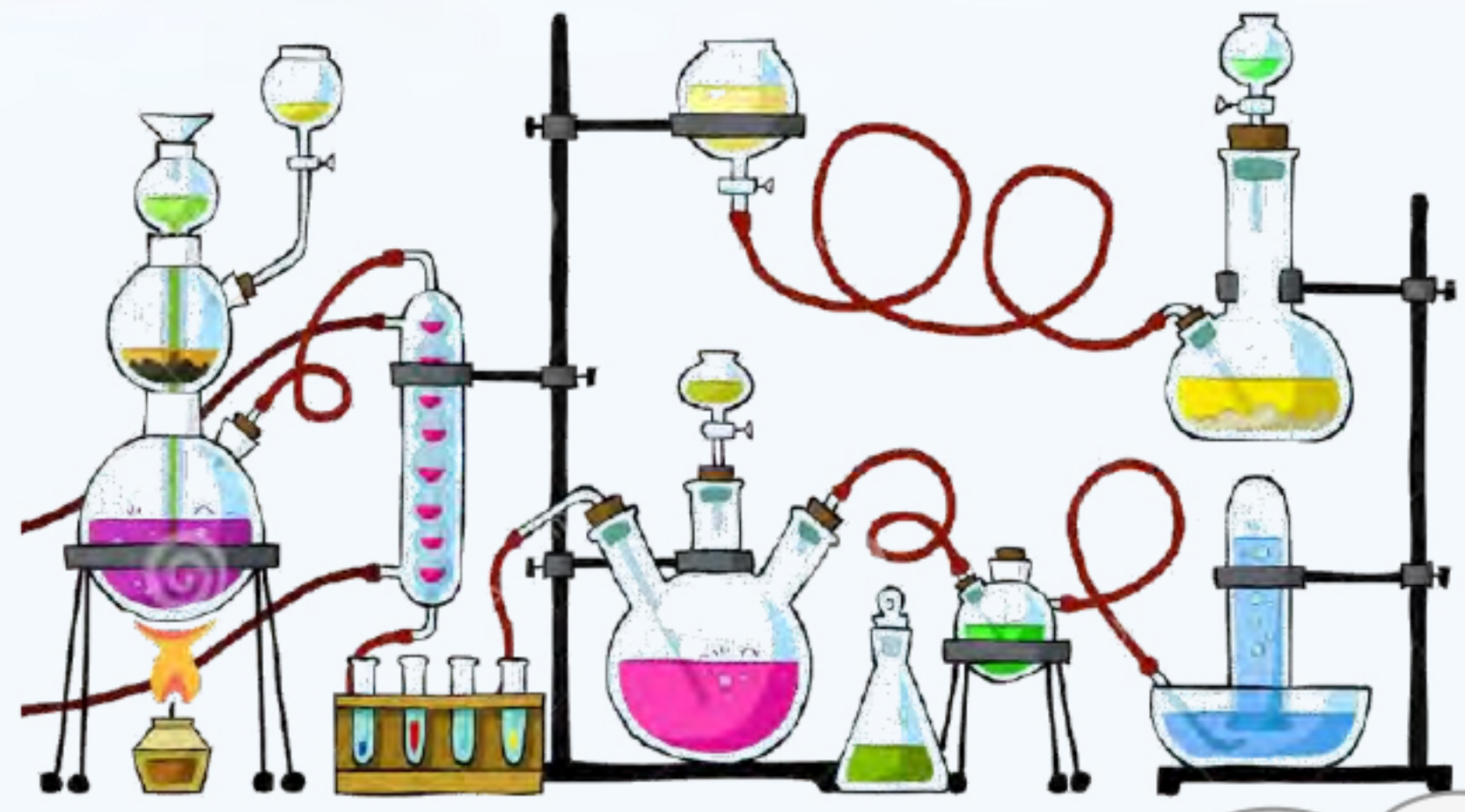
Yikes! So many chemicals in the cleaning agent. Where do they come from and where do they end up?



We need some proper cleaning agents. Let's take a look together what is inside these bottles.



Petroleum-based



First, crude oil is extracted from underground reservoirs.

Then, different organic solvents are mixed to the oil.

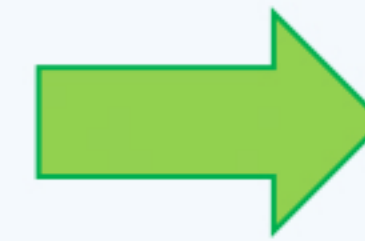
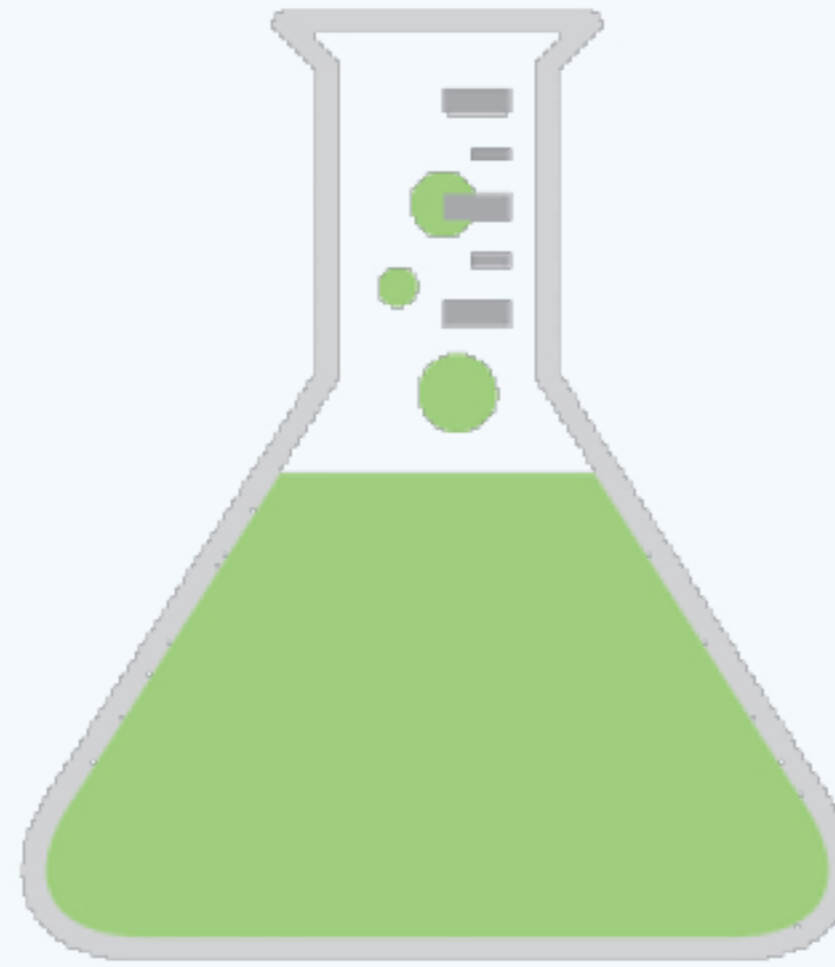
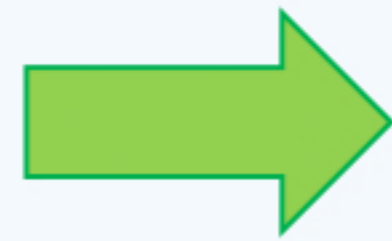
The final products are for example cleaning agents, products that dissolve dirt.

However, using such cleaning products can pose a significant risk to the environment and human health.



Bio-Based

Renewable Resources (plants, farmers' left-overs...)



Eco-Friendly products



For bio-based products we use 'renewable' and biodegradable resources, such as plants!

Oils and enzymes are extracted from plants and mixed with other natural ingredients. The results are cleaning products that work just as good as petroleum-based ones.

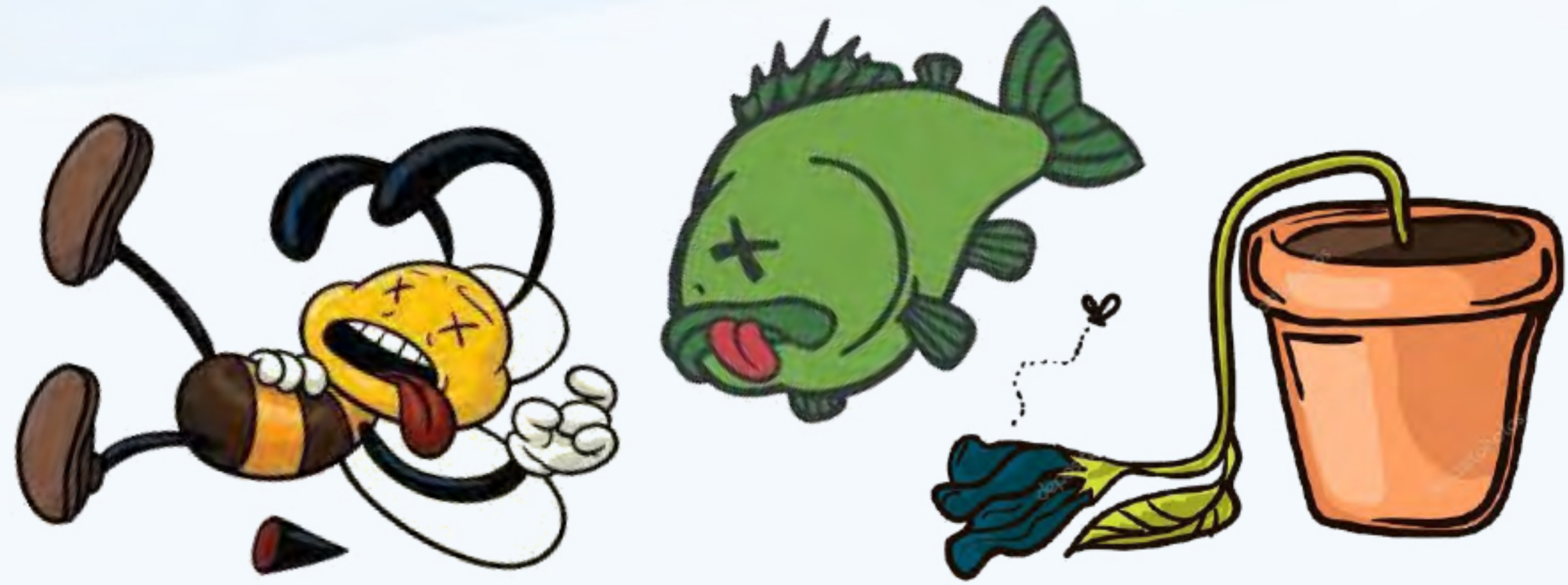
However, these bio-based products are far less harmful to the environment and to the person using them!



Petroleum-Based

Bio-Based

- Harmful to Animals & Environment



- Dangerous for Humans (Corrosive)

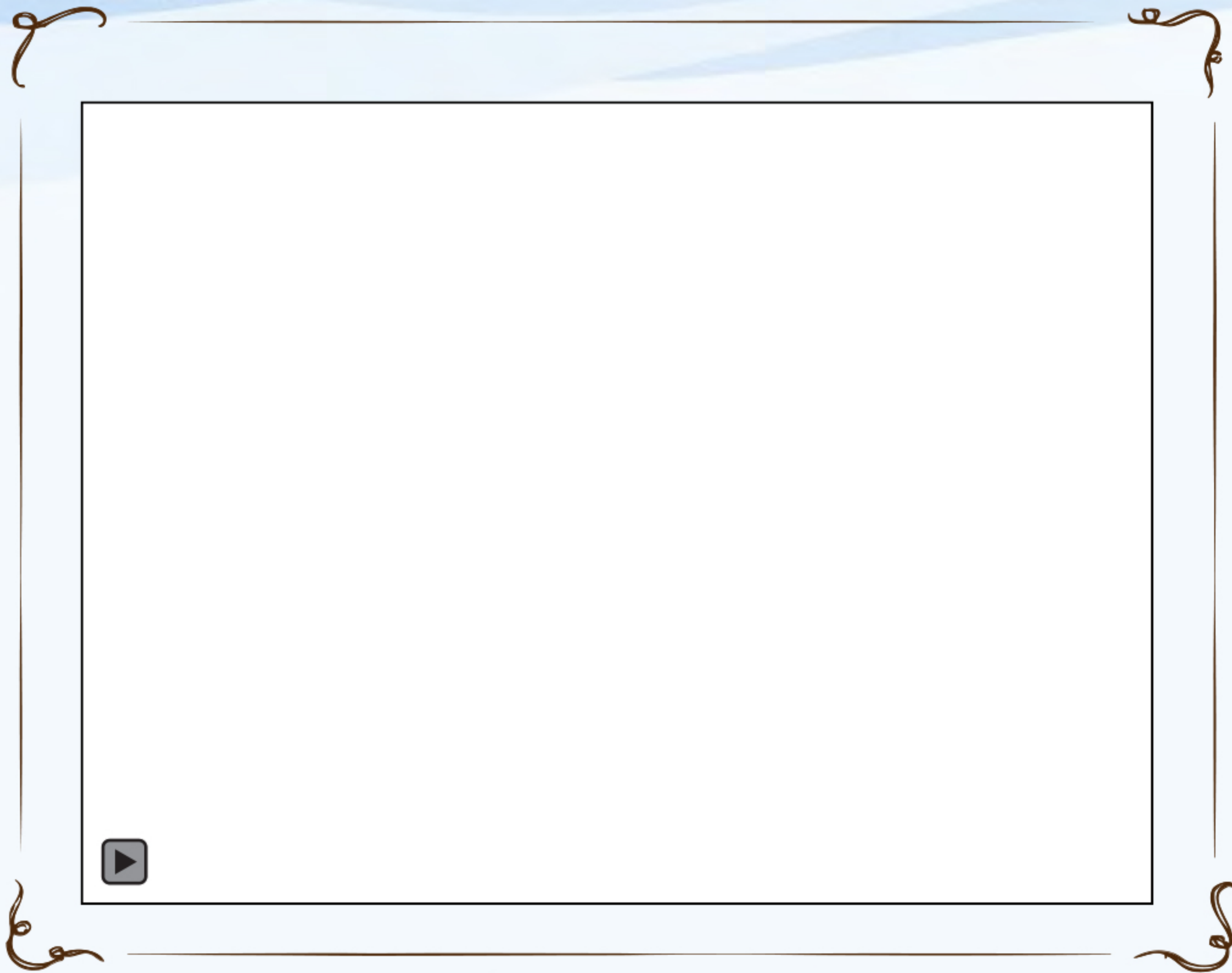


- Eco-friendly (does NOT harm Animals and the Environment)



- Safer for humans
- Replaces 'dirty oil'



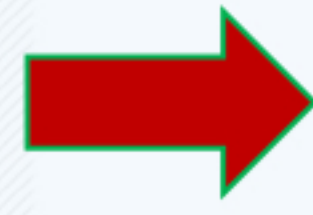
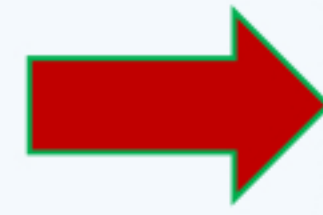


For me, it is more fun to learn with videos... Let's see what Krisztián has to tell to us!



From Manufacturer to Nature

Petroleum-Based



Many petroleum-based products cause harm to humans and the environment. Bio-based products however, most often do the job just as good, while not causing such harm! The environment says: 'Thank you for thinking bio-based!'

Bio-Based



I can breath underwater!



Quiz

<https://play.kahoot.it/#/k/Oac20799-bd70-4fcd-b308-2cde68a050de>

What did we
learn in this
class? Let's play
a little game.

Kahoot!





*Well done everybody
and thank you for your
company!*

**DANK JE WEL
AND THINK
BIOBASED!**

