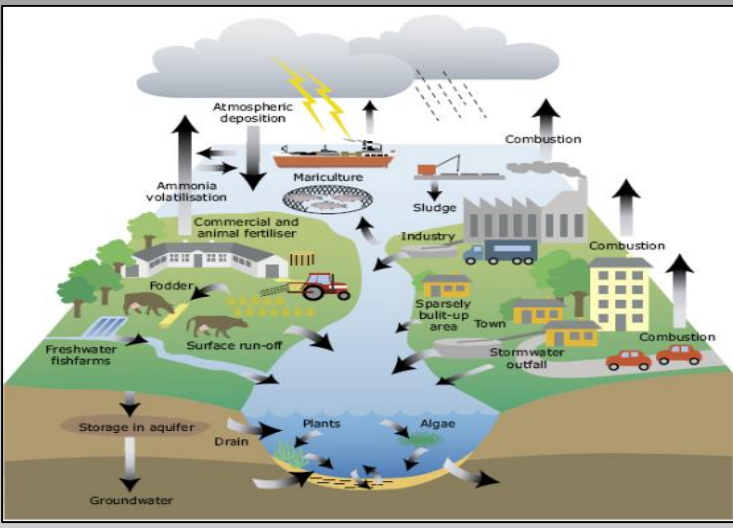


Discovery of a new photocatalyst to solve water pollution



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When I was in India I saw **black rivers** there I realized that pollution is enormous...



Forms of environmental water pollution are diverse :

dyes, herbicides, pesticides, drugs

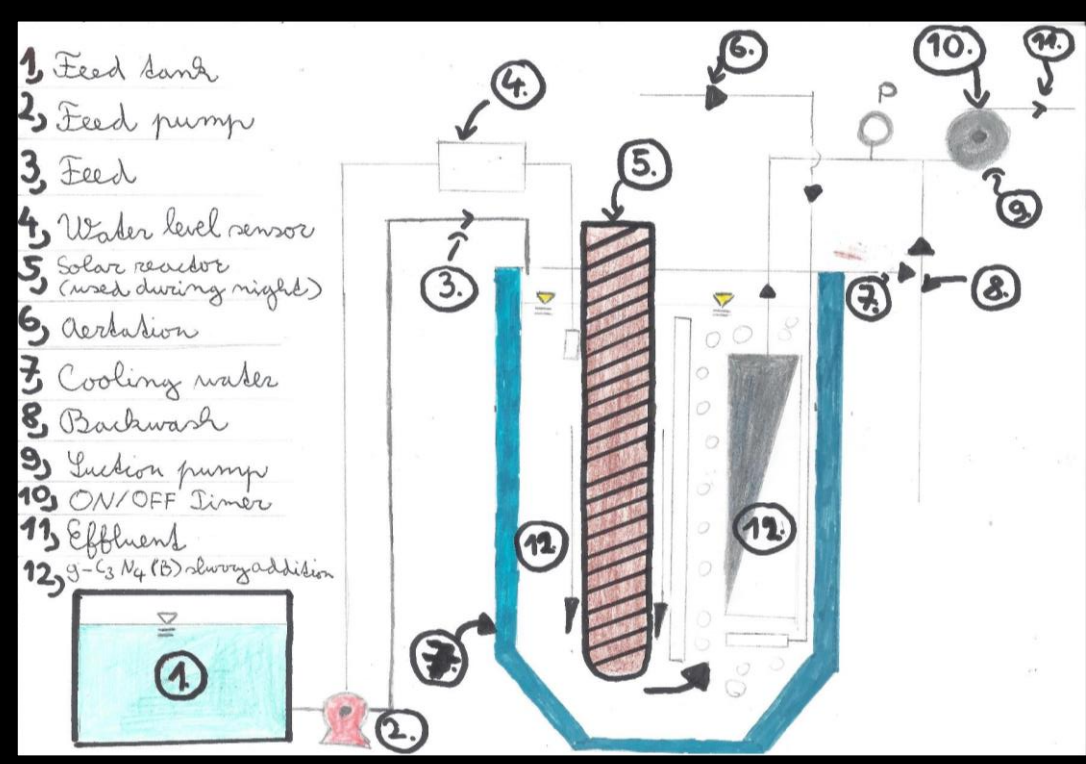
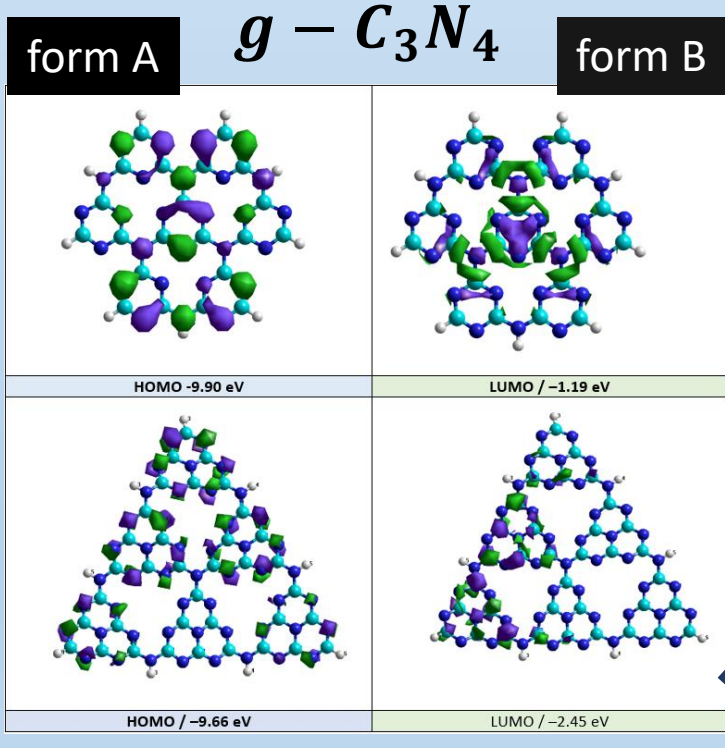
I want to find another means to use photocatalysis and I am driven by the potential impact it could have on the fight to reduce water pollution.

My solution: $g - C_3N_4$ (form B)

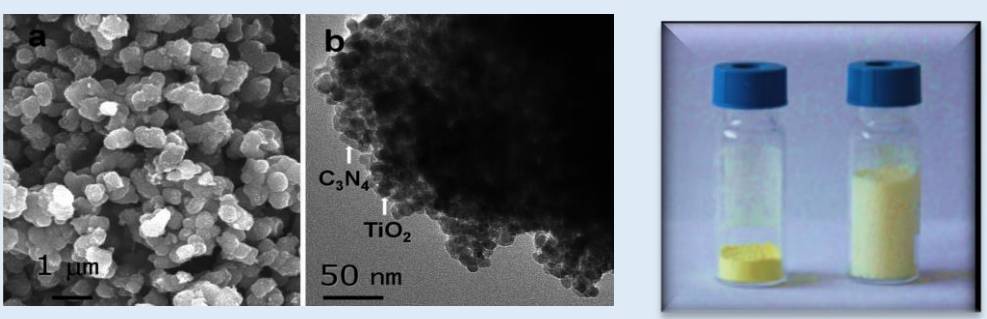
Current photocatalysts use **UV radiation**
expensive + can not clean polluted rivers



Future
Part of slurry type photoreactor set in the sewage plants
powdered $g - C_3N_4$ is suspended in liquid



My newly designed photocatalyst ($g - C_3N_4$ form B)



Uses visible light to produce hydroxyl radicals
Removes organic pollutants
Not harmful for living organisms



Every experiment confirmed that $g - C_3N_4$ has a bright future in cleaning water and saving human lives all around the world