

# Is bioavailability crucial to remove persistent pollutants in water?



Nowelties  
European Joint Doctorate

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- Aquatic microorganisms remove bioavailable compounds during wastewater treatment.
- However, organic micropollutants (OMP) mostly persist.

Background

- To investigate if OMP persistence relates to limited bioavailability
- To search for bacterial limits to degrade and metabolize OMP

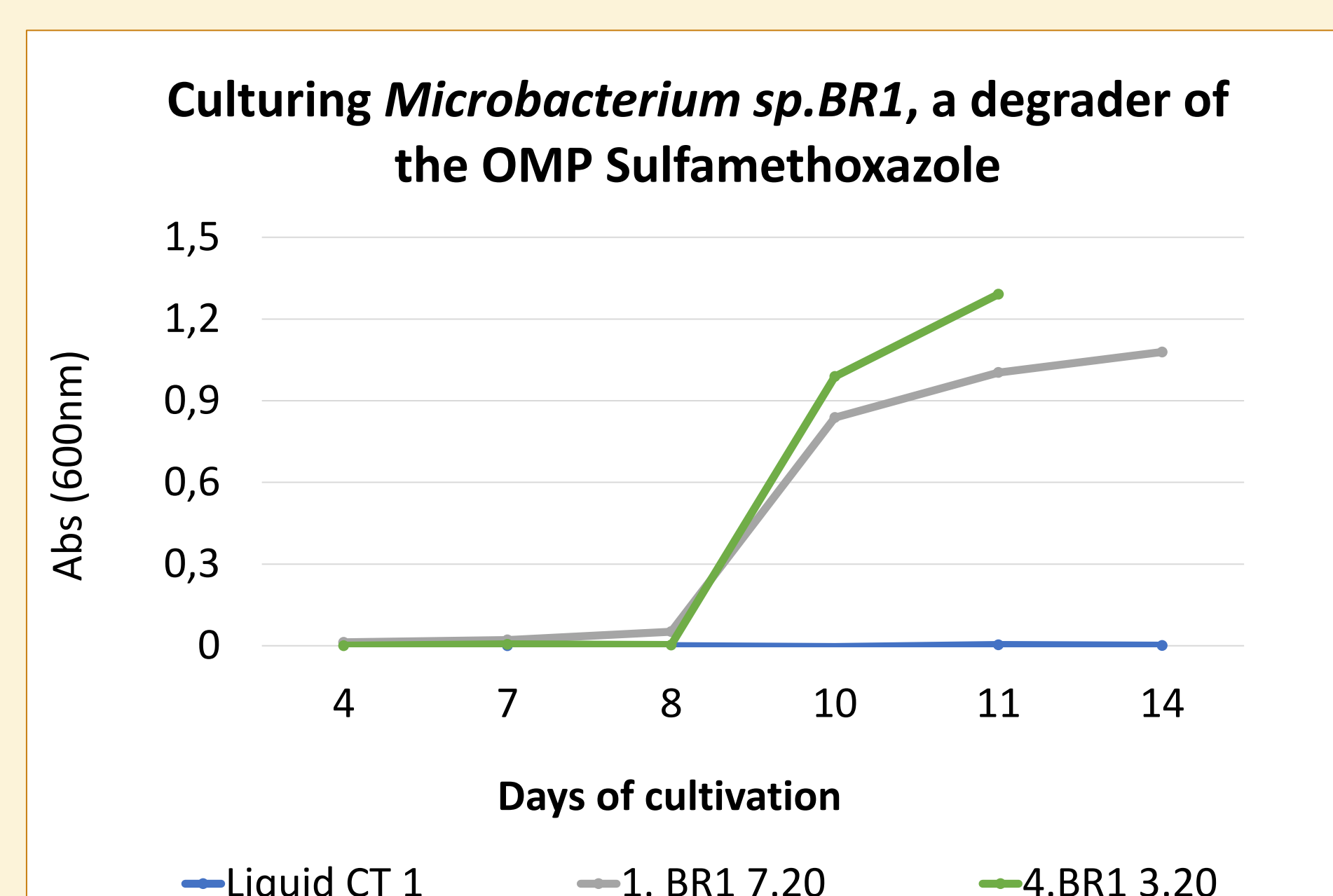
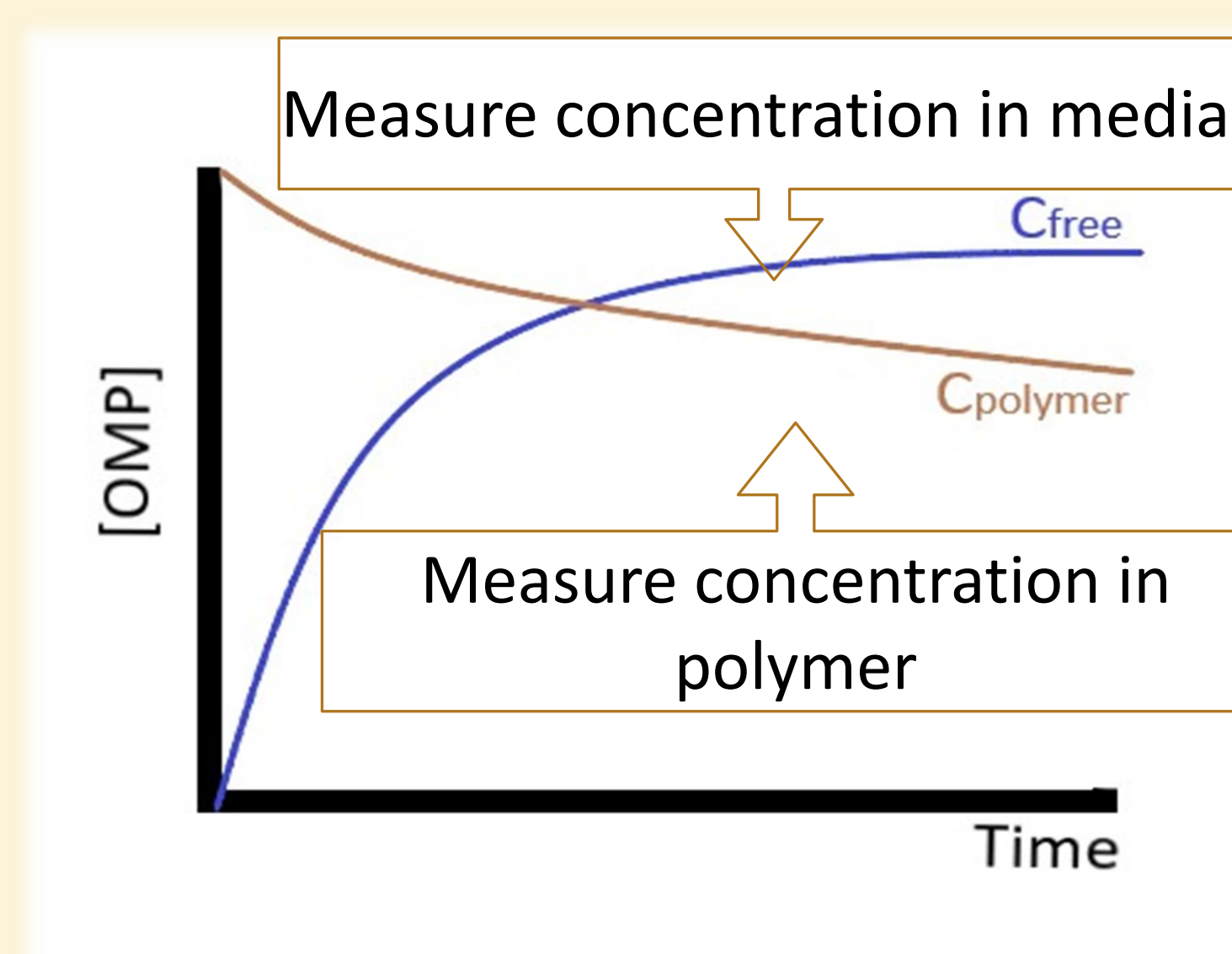
Aims

- Select matching microorganisms
- Develop a passive dosing system
- Keep bioavailable OMP supply
- Test low concentrations
- Track fate of pollutant using radioactivity analytical techniques

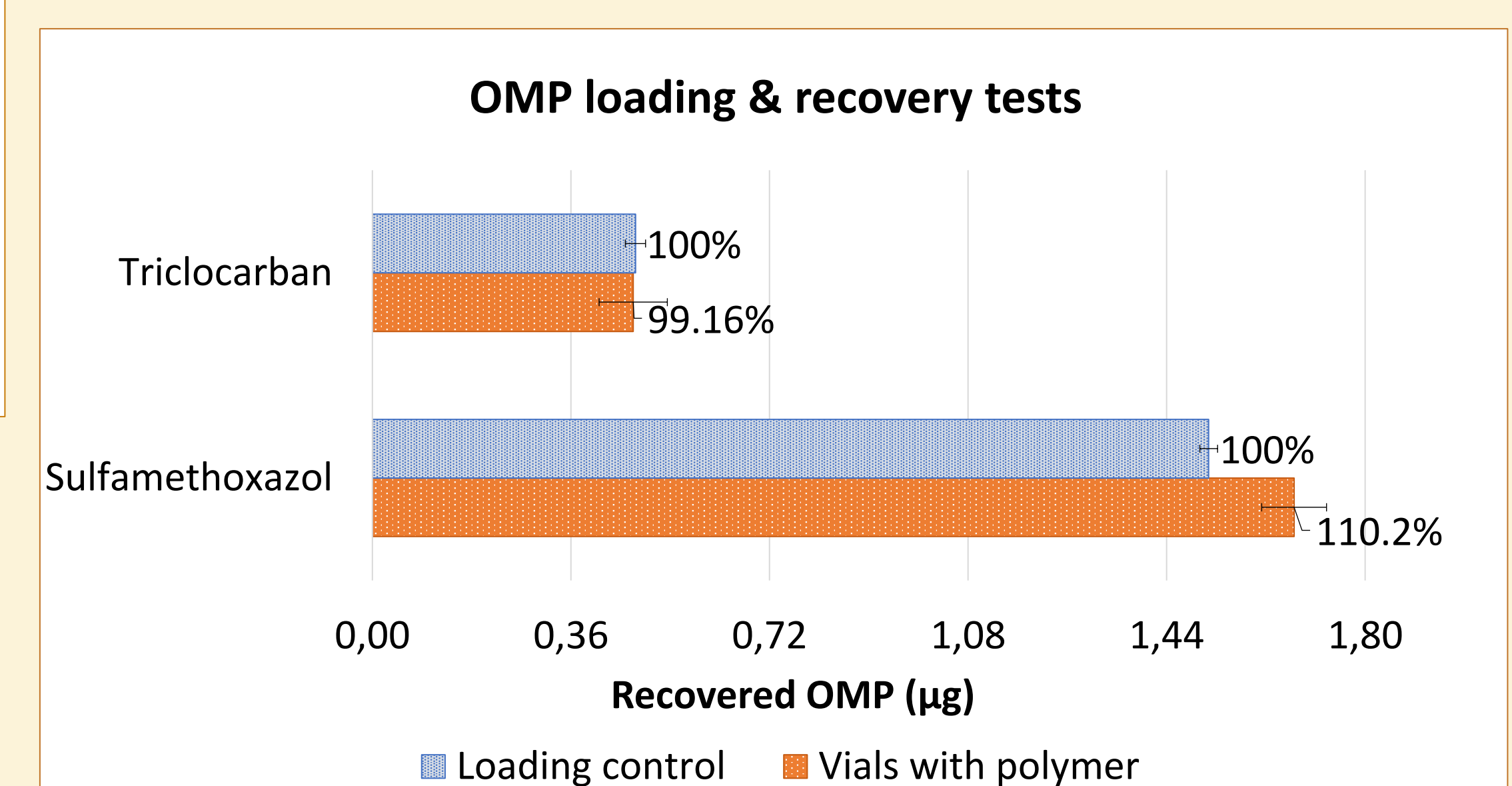
Methods

- Bacterial culturing
- Loading tests
- Affinity for polymer
- Analytical results

Initial results



🌀 Successful cultivation in media enriched with Sulfamethoxazole



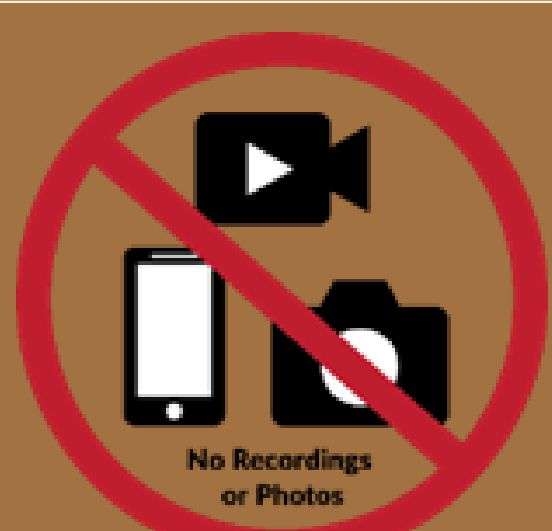
Find extra information of the project at:

🌐 [Blog: Project in simple words](#)

🌐 [Nowelties website](#)

🌀 Set up with Triclocarban is functional

🌀 Set up with Sulfamethoxazole needs further optimization



“This project has received funding from the European Union’s Horizon 2020 research and innovation program under the Marie Skłodowska-Curie grant agreement No. 812880”

