Microalgae as SLA 3D printing material

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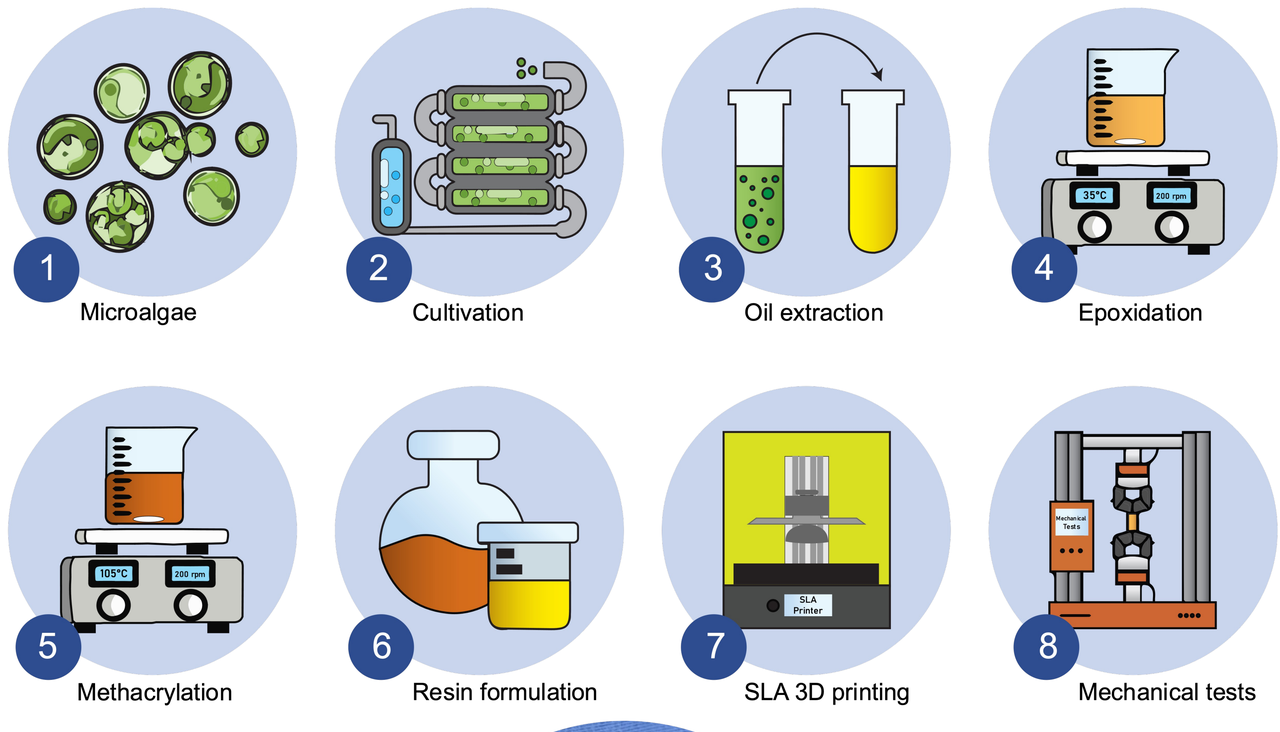
Objective(s)

This project aims to use and optimize microalgae oil as a renewable material for producing SLA 3D printing resin, to phase out fossil fuel feedstock.

3D printers can produce physical objects in a few hours at low cost, low waste, and tailored to the needs of each user. SLA printers are some of the most common 3D printers and use light to crosslink a liquid resin to solid objects layer by layer.

However, in a time when the world is trying to reduce the use of plastics, 3D printing seems to be moving counter to that in terms of "green" materials, especially for SLA printers, for which the methacrylates in the resins cannot be recycled and still derive from petroleum-sourced products.

In that direction, we aim to provide a sustainable alternative for SLA printers using microalgae as 3D printing material.

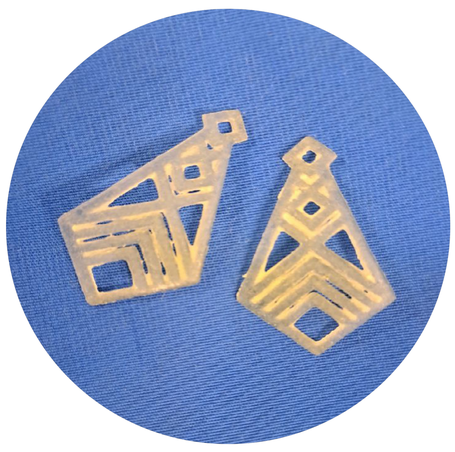


Target audience

Our audience is mainly formed by scientists who are not experts in the analyzed field.

Medium

Our medium is a presentation to a lay audience.



Microalgae-based
3D printed earrings

Scientific story

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