



A Factory... in a Factory?

Our objective is to develop micro-units for autonomous production thanks to two technologies: **continuous flow chemistry** and **AI control**.

- Continuity of production
- High quality products
- Reduction of industrial risks
- Reduction of environmental impacts

Proof of Concept V1

A first version, on a laboratory scale, has just been developed by Alysophil!



The Reaction



The synthesis of an odorant molecule, used in the field of aromas and fragrances: **isoamyl acetate**.

- **3D printed** reactors
- Parallel or serial configurations
- Room temperature
- Catalyzed by the CALB enzyme
- Catalyst immobilized in the reactor

Purification



The reaction product is purified by distillation

- **3D printed** distillation column
- Continuous distillation
- Heating to 100°C
- Filled with glass beads

Control Panel



A compact computer

- Touchscreen interface
- Camera for **real time observation**
- Flow control
- Injected volumes monitoring
- Video streaming
- **AI-ready**

In a few months a V2 will be implemented, featuring AI control for the first time

