Workshop

"Why & How to create Premium beauty & healthy Ingredients from biomass & waste"

Christian Gombert, Nutrevent 2021 January 26 th, 2021



Within Air Liquide Healthcare





Air Liquide Healthcare's 2019 REVENUES

3.7 billion €





Seppic in figures

Customers are widely served by Seppic







4 customer service centers

6,000 customers80 distributors100 countries





Designer of Ingredients

A unique platform to address all markets

Rheological modifiers, polymers

SepigelTM, SimulgelTM, SepiplusTM, SepinovTM, SepimaxTM, MontagelTM, ...

Natural & Green Chemistry Active Ingredients

Ephemer™, Juvenessence™, Sepilift™, Aquaxyl™, TECA, Ceramosides, ...

Green specialty emulsifiers, surfactants

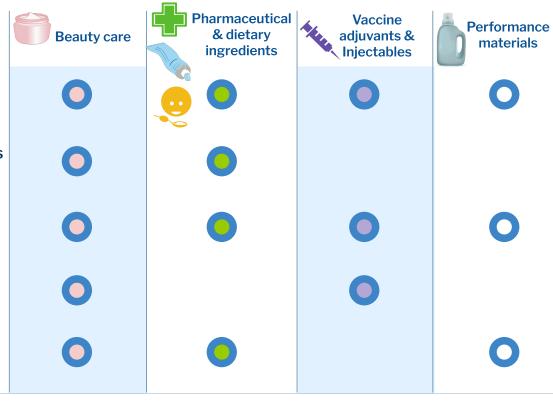
Montanov™, Simulsol™, ...

Emulsions

Montanide™, Geltrap™

Coating, encapsulation

Sepifilm™. Sepisperse™....

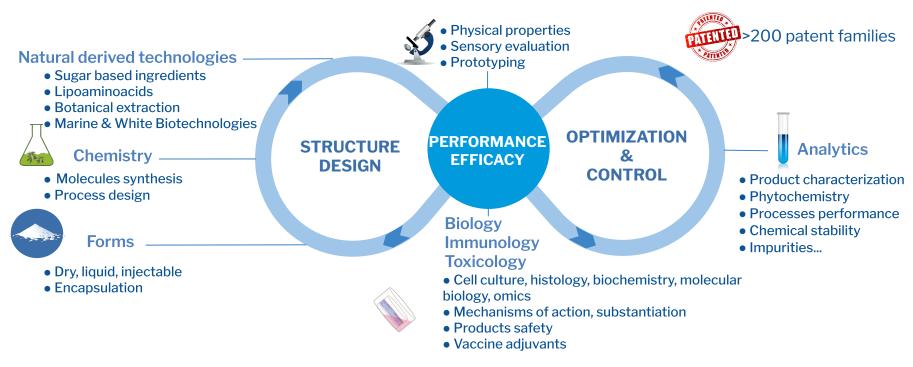




Innovation Department

4 RD centers / 110 people



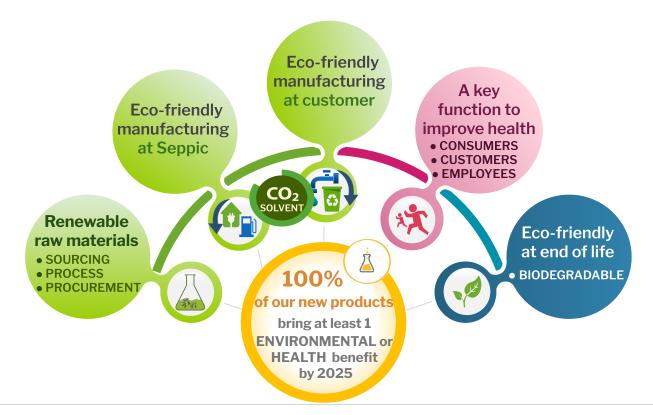






Conscious Innovation

Increase products' benefits





Conscious Innovation

Sustainability Investment

Vegetal supply chains management

- Right of use & access to natural resources
 - Compliance with Nagoya protocol from ideation
- RSPO member since 2010
- ➤ Garennes Colombes/ Castres/ Pontrieux: Mass Balance certified

BVC-RSPO-1-1972708497 and BVC - RSPO-1-1972708497

Eco-Design strategy



 CSR indicators as part of continuous improvement process (Carbon footprint...)

• ISO 16128 Naturality Profile





Market & consumers attempt

87% French people



Bad image

- Chemical "vegetal chemistry"
- Non biodégradable*
- Raw materials mediatic bashing



Good image

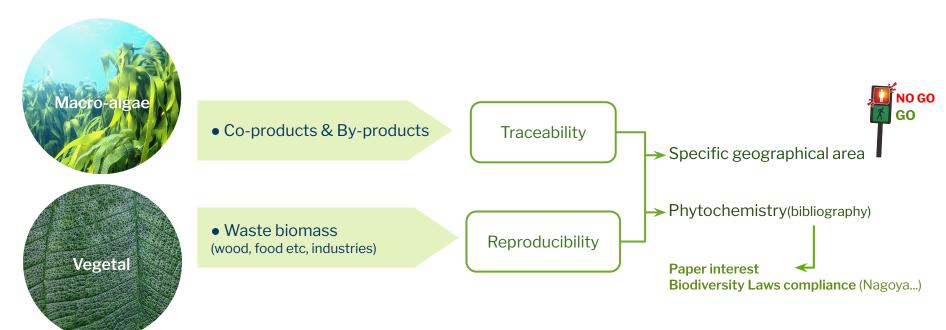
- Natural, bio-sourced raw material
- Biological agriculture origin
- Sustainability concern
- Made in France, locally, traceability
- Safety* of use, which protect health...



^{*} false belief...

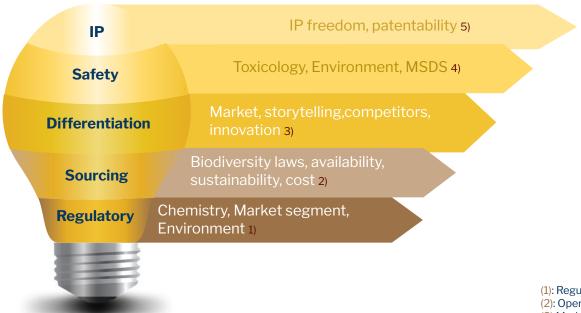
Our biomass focus

The biorefinery: an opportunity to develop all raw materials





From the idea to the market





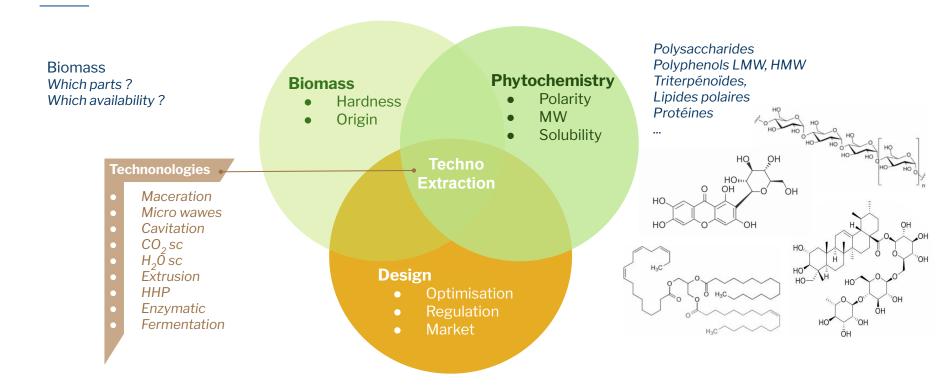
- (2): Open Sourcing Unit
- (3) Marketing & Innovation Units
- (4) Regulatory Toxicologist expert
- (5): IP Unit



From the toolbox



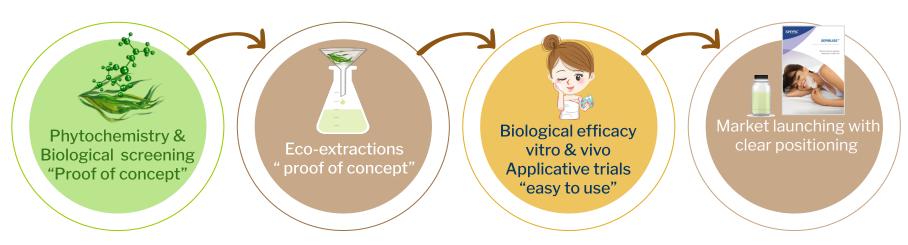






PROJECT MANAGEMENT

STEP BY STEP PROCESS



Launched product: **SepiblissTM** (seed coriander sativum)

Tomato, shea butter, Hibiscus, wood coproducts... examples of study aborted cases



The pathway to Premium Ingredient

Keeping in mind market requirements...

Biomass/ Co-products availability Regulatory constraints

Nagoya protocol

Safety

Sustainable obtention process

Carbon impact reduction

Acceptable cost

Efficacy

Industrial units

Market trends

- From waste to cosmetic ingredient as a philosophy and a key driver >
 https://www.upcycledbeauty.com/zero-waste-beauty
- Trend of upcycling Sept 2020 https://www.premiumbeautynews.com/en/interest-in-upcycled-ingredients,17125
- Seppic in the trend with existing ingredients and new coming projects
 https://www.seppic.com/en/beauty-care-mag/sustainable-innovation-starts-smart-sourcing





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Waste biomass: What's next?



- Biodiversity law
- Availability with high reproducibility
- Industrial investments (pre-treatment, extraction..)
- Cost



- New dedicated companies
 - Start-up: hubcycle for example
- Clusters
- Collaborative projects
- - → with full traceability- → from local by-product

Open innovation

Various internal pending projects to be transformed & published within the next 5 years...



