



BIO-MATERIAL CONSULTANT



Not one day passes without a reminder that we must act to mitigate the effects of climate change .

Materials are the building block of our society and they are at the core of <u>innovative circular economies</u> forming.

That is why I support companies and industries with my expertise in <u>biobased / biodegradable plastic, (bio)-</u> composite, and (bio-)material.

Every <u>waste stream</u> is different, each context is unique. I do not like doing the same thing twice so I adapt my role and action plan to every new assignment.

My services range from setting up material databases to developing tailor-made bio-composites.



IDENTIFY

We target <u>bio-based resources</u> that are relevant to your business and identify <u>bio-material potentials</u>.

Whether you are in the automotive, retail, hospitality, food, fashion or footwear, there is a relevant waste streams to tap into. We will find it.

INSPIRE

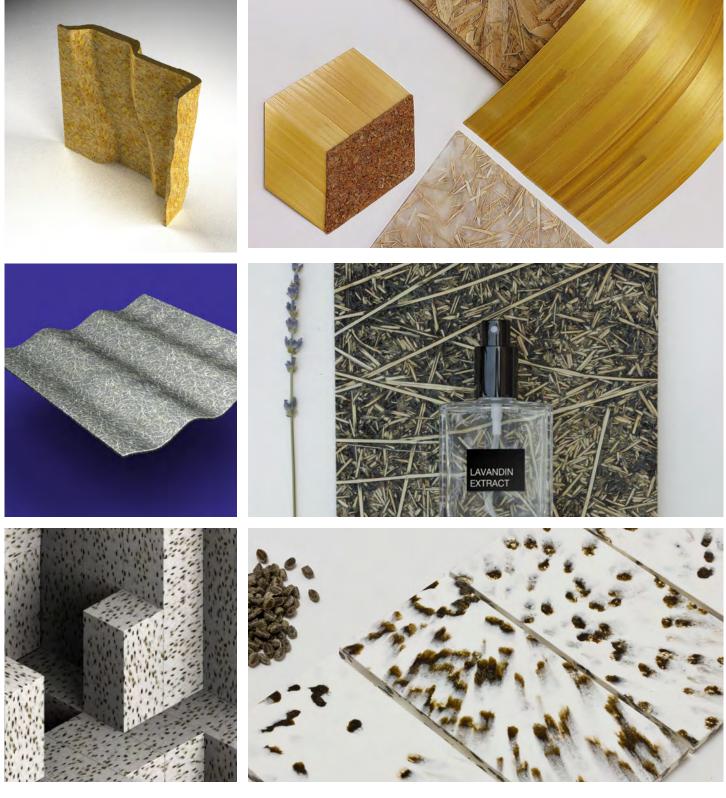
We design <u>bio-material narratives</u> to inform your consumers.

We inspire your team with <u>color, material and finish</u> (CMF) studies, and set up <u>material libraries</u> to support specific projects.

IMPLEMENT

We love <u>cross-disciplinary</u> collaborations. Together with material producers, compounders and scientific partners, we can R&D bio-materials based on the latest scientific knowledge.

We developp materials with <u>contemporary aesthetics</u> that your <u>production chain</u> can actually process.



CLIENTS REFERENCES

FONDATION LUMA ELHO GROUP LANCÔME - L'OREAL VEUVE CLIQUOT - LVMH LE MERIDIEN - MARIOTT SEABOURN CRUISE LINE



LUMA FOUNDATION



SEABOURN[®]



LANCÔME



BIO-BASED RESSOURCES

Bio-based resources are becoming desirable and viable commercial choices for industries.

We target biomass <u>by-products</u> and <u>waste streams</u> relevant to your business.





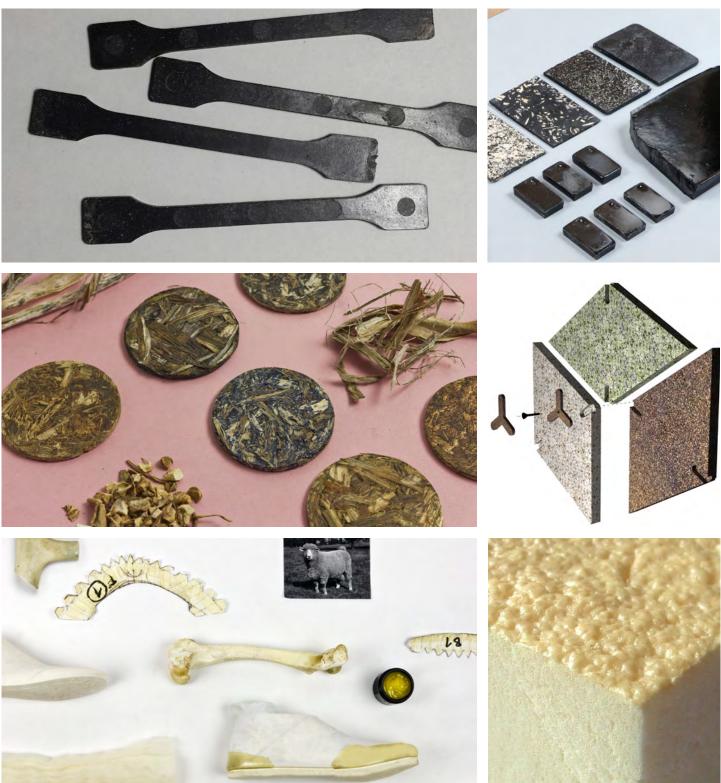




INDUSTRIAL BY-PRODUCTS

Design is not only about products but also about (natural-) resources, (bio-) cycles and (eco-) systems.

We develop bio-material solutions embedded within production and consumption systems.



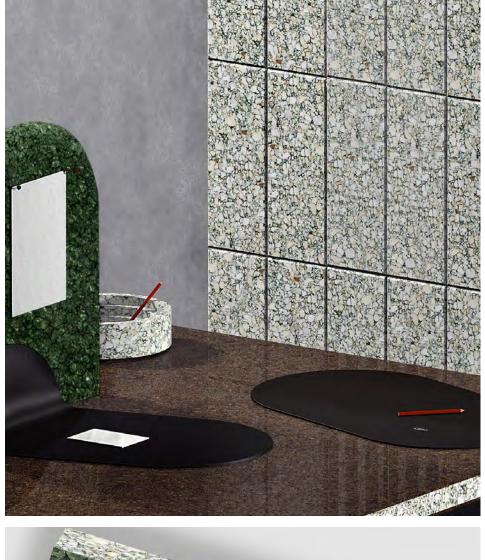
BIO-MATERIAL DEVELOPEMENT

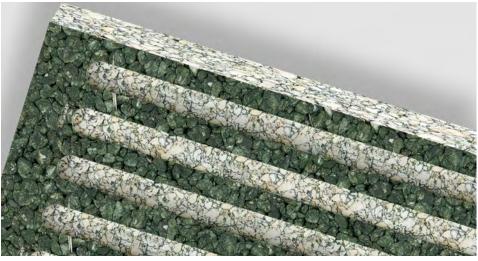
Bio-based materials are not just replacing plastic.

We create <u>novel & unique</u> bio-materials going beyond preconsived idea and expections set by durable & disposable plastics.

and we develop their unique values, characteristics & mechanical proprieties.







A SYSTEM OF BIOMATERIALS MADE FROM SUNFLOWER BY-PRODUCT

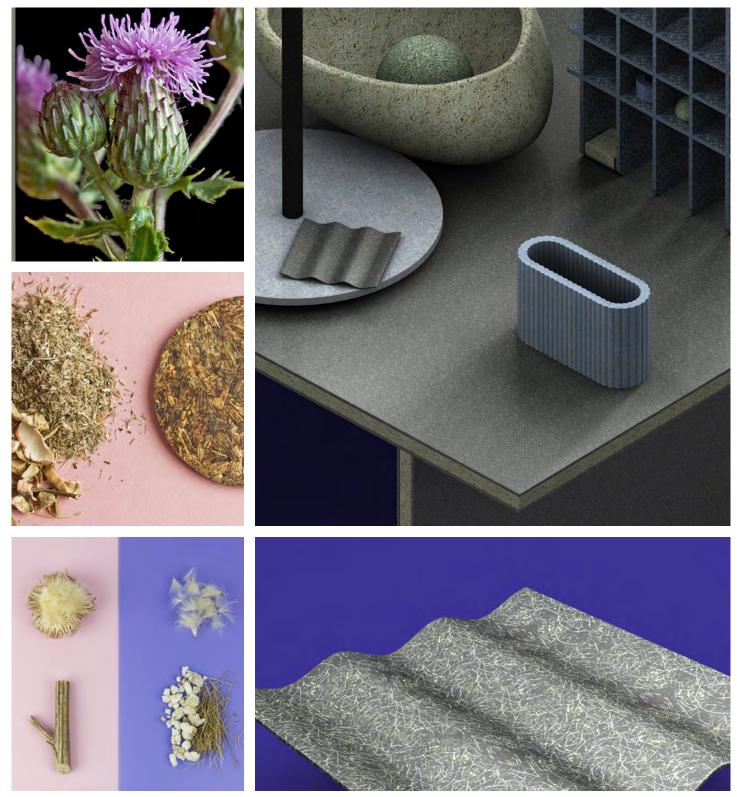
Focusing on the transformation of bio-matter, this project explores the potential of sunflower leftovers to create new applications and prototypes embedded in sustainable, innovative production systems.





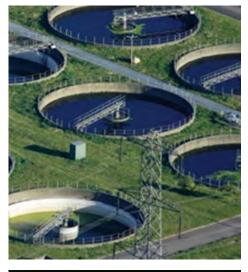
EXTRUDED PLANT PASTE

« The dairy farm as a universe » is a design research project that explores the potential for sustainability and closed-loop material flow within the premise of a dairy farm. A dairy farm is a merger of various natural and industrial systems.

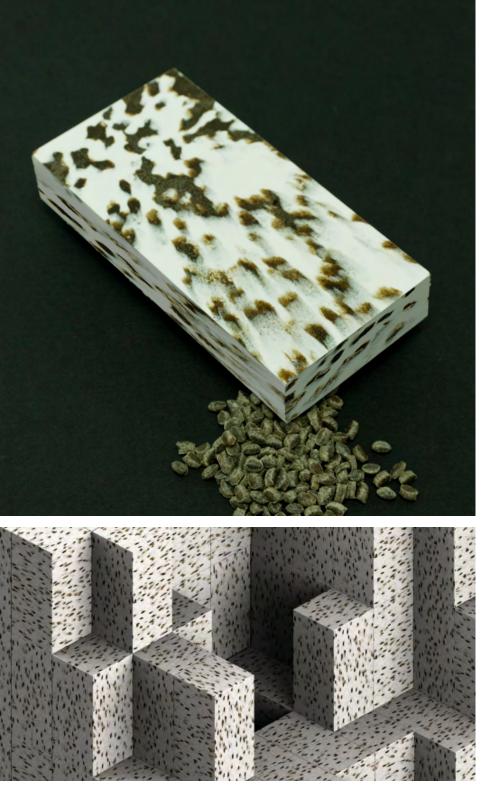


FROM INVASIVE SPECIES... ...TO BIOMATERIALS

We have been developing biocomposites based on invasive species such as Thistles.







FROM MUNICIPAL WASTE WATER TO BIOPLASTIC

PHA polymer and cellulose fiber can be extracted from municipal wastewater and turned into a biocomposite. This composite can be biodegraded in the same water it originated from making it a truly circular material.



PINE TREE FULL-USE

This project proposes to use natural building blocks extracted from the Pinus Pinaster tree to developp sustainable materials. The result is an abstraction of a tree, a black matter joining, coating, blending in and contrasting with pine wood.







FROM DISTILLATIONS BY-PRODUCT... ...TO BIOMATERIALS

Fragrances are distilled from roots, leaves, bark, and flower,... of various plants. A large quantity of biomass is required to obtain a small quantity of Absolute - the most concentrated form of fragrance. The by-products of these extraction processes can be turned into decorative and functional bio-materials.



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