annemarie maes

Research - Installations - Objects - Photographs - Video

BEE AGENCY

SENSORIAL SKIN

CONNECTED OPEN GREENS

LABORATORY FOR FORM & MATTER

BEE AGENCY

Transparent Beehive
2012-2013

TIK-festival, Brussels

The Transparent Beehive is a living sculpture in the form of an observation beehive made from plexiglass, wood, aluminium and steel. Inside is a living bee colony that has access to the outside world through a plexiglass pipe.
The beehive is internally structured like a book. Each page consists of a wooden frame covered by an aluminium casing and mounted on dry-lubricated sliders. The wooden frames are enhanced with microphones which pick up the vibrations and sounds of the hive. These sounds are made audible, and I use them to monitor the health of the bee colony by the means of the sound development. Cameras inside the hive monitor the growth of the wax structures and the activity of bees. Additional sensors measure temperature, humidity, and other microclimate measures. The data is treated by sensory processing, pattern recognition and AI algorithms and visualized using sophisticated computer graphics algorithms in order to make the state of the colony tangible.

Alien Intelligence, 2013

Koç Gallery, Istanbul

The installation shows a series of Scanning Electron Micrographs (SEM), presented upon a constellation of wooden cubicles of different heights. The photos are made with the high-end Scanning Electron Microscope (SEM), which is used for scientific research and can visualize samples in 3D view on +30.000x enlargement scale.
The research (in collaboration with scientists from the VUB, Free University Brussels) lead to a remarkable series of photographs.
The samples used for the study are different honeybee-parts and pollen grains collected in the Open Air Laboratory : proboscis, antennae, legs, eyes as well as pollengrains the bees brought back from their foraging flights.

Golden Beehive

2014

The beehive is a system of homeostasis. Homeostasis is the property of a system that regulates its internal environment and tends to maintain a stable, constant condition of properties like temperature or pH.
A medium sized bees' nest needs 1200gr wax to be build, and 7,5 kg honey for the energy of building. The beeswax is composed of more than 300 different chemical components.
The comb is constructed vertically, parallel to the earth's magnetic field. The bees can construct this way thanks to the gravity receptors that are situated in all their legs and body joints.

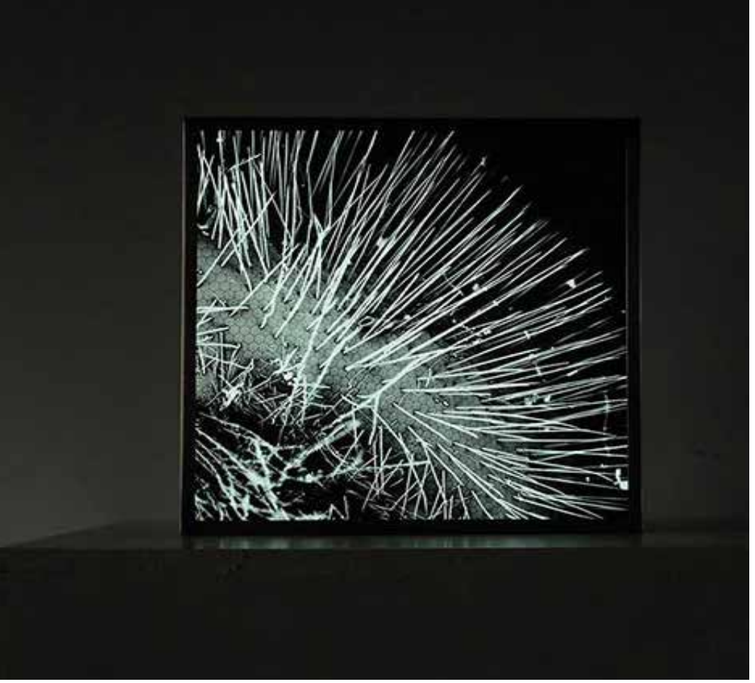
The Golden Beehive is inspired on the morphology of an *Eucalyptus* seedpod and is made from pure beeswax. It has the size needed to house a bee colony in the wild.

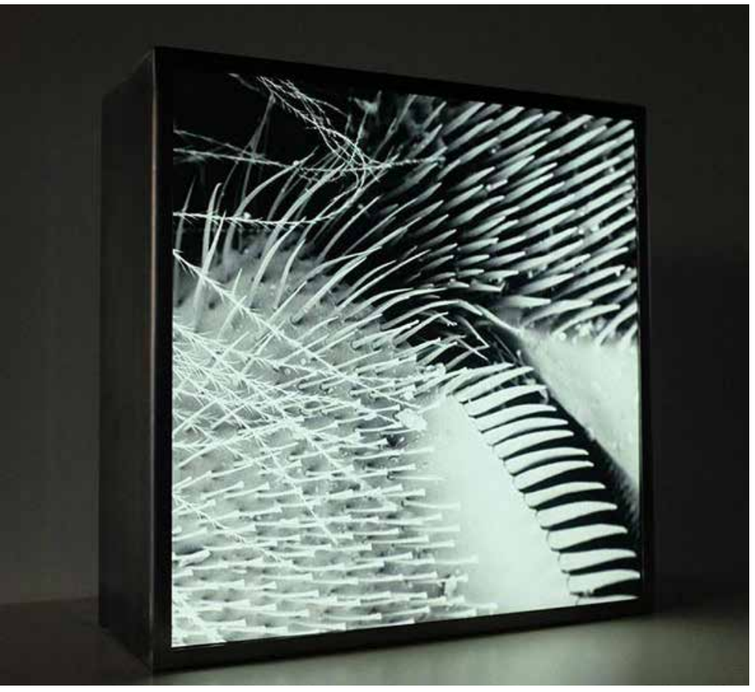
Guerrilla Beehives
2014

Fields, Rixc/Riga

I want to populate cities with a network of intelligent ‘guerilla-beehives’. These beehives should offer shelter to bee colonies ‘in the wild’ – rather than force bees into artificial apiaries. The bee colony should be able to thrive without the help of a beekeeper. Guerilla-beehives are intended for pollination and thus preservation and remediation of biodiversity.
I imagine a world where biological fabrication replaces traditional manufacturing and thus where new sustainable beehives can be generated simply by growing them. The design of such beehives will be inspired by art forms from nature and so I am searching the scientific literature to find the requirements for an ideal honeybee nest and create physical prototypes using smart and organic materials.

On the pictures we see 2 (guerrilla =mobile) beehives. The mobility is expressed by a basic wheelbarrel-model. One ‘nest’-part is made of plaster, wood and wax (inside), the other one is made of dried coconut leaves.



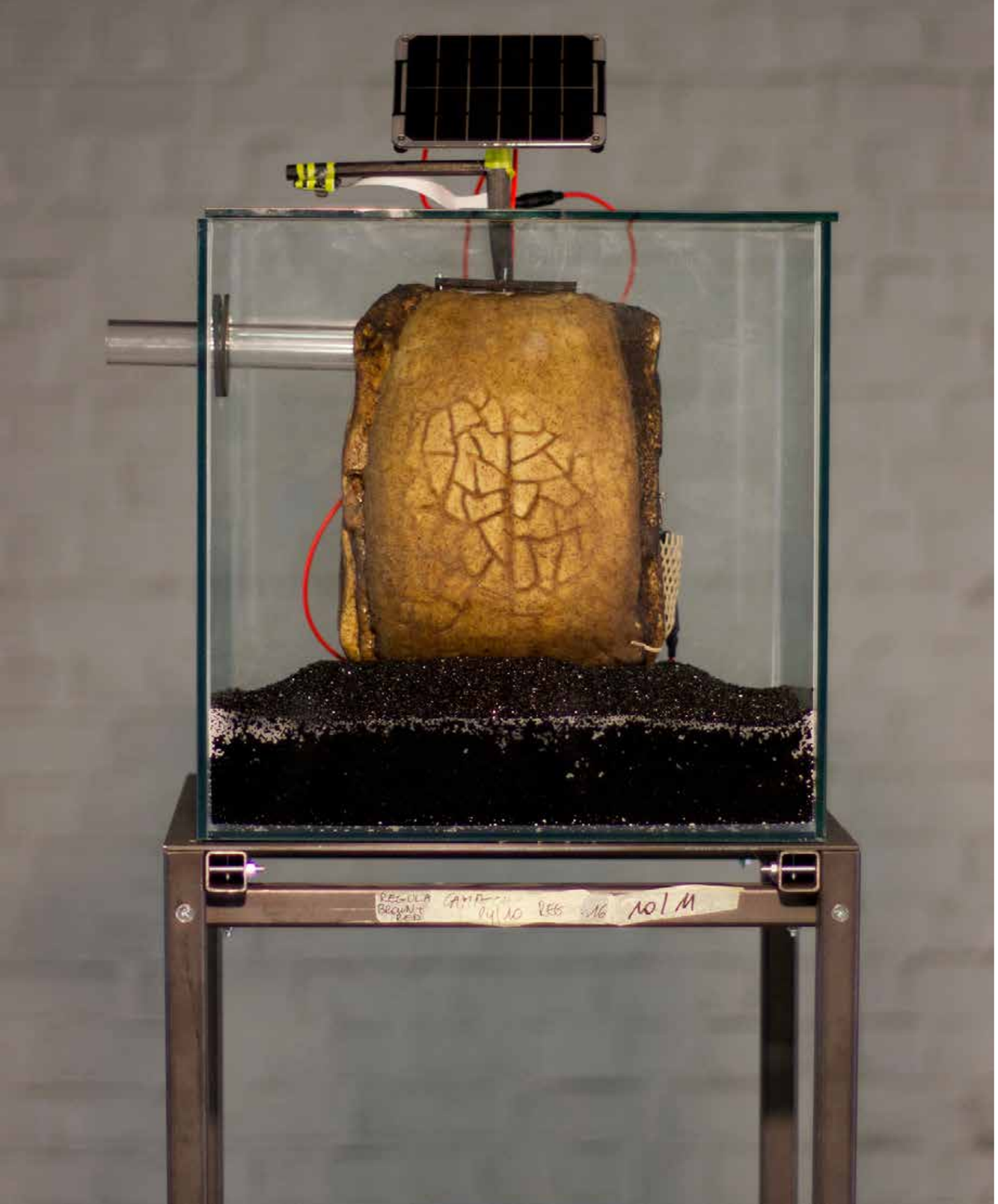


the Pollinators
2013

Fields, Rixc/Riga

The work is a series of 2 x 4 (different) lightboxes, representing microscopical photographs of bee-parts and pollen grains. The photos are made with the high-end Scanning Electron Microscope (SEM), which is used for scientific research and can display greatly enlarged images of objects, also in 3D view. Honeybee parts (proboscis, antennae, legs, eyes) were closely inspected.

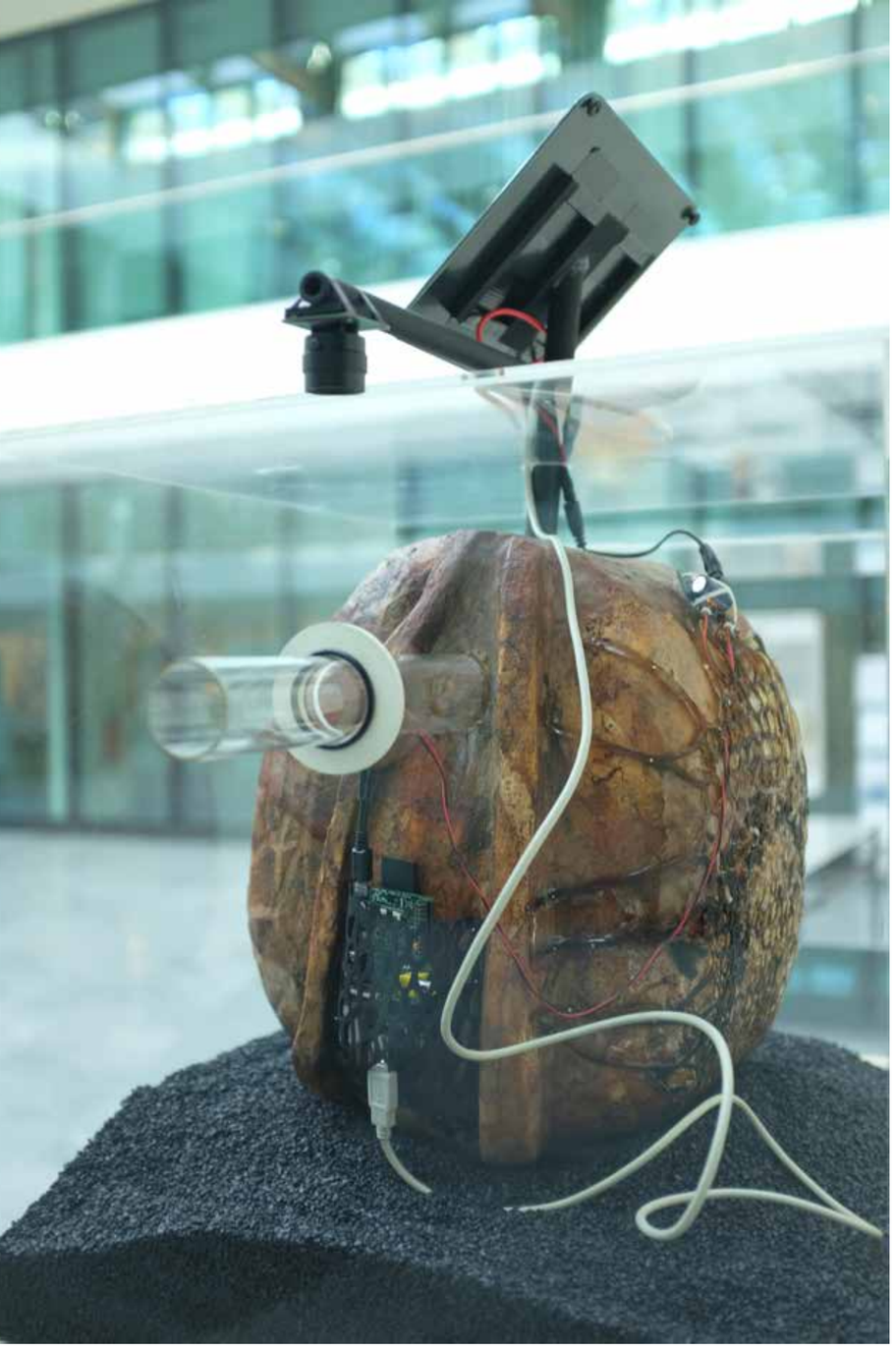
They are everywhere and they can be perceived as quite the alien intelligence; six-legged, with their numerous eyes, capacities of motion and sensation so different from our own. No wonder science fiction has been inspired by insects. But also other fields, like robotics as well as network design. Insects are more than creepy-crawly bugs; they are also a central reference point of so much of network culture, from talk of hive minds and distributed networks to algorithms that function like ant colonies; some refer to our cognitive capitalist practices as "pollen society".
Jussi Parikka 'Insect Media: an Archaeology of Animals and Technology'



Intelligent Guerrilla Beehive
2016-2017

Ars Electronica, Hybrid Art - 2017

The bio-art project ‘The Intelligent Beehive’ imagines a new kind of beehive which is both a safe, healthy haven for swarming urban honeybee colonies as well as a device for monitoring their behavior. This long-term project has been an incredible source of inspiration for artistic research into issues of ecology, architecture and social sustainability of urban environments.
The Intelligent Beehive serves as a physical model for biological actions in conjunction with technological fabrication (3D printing, laser cutting, CNC milling). It is a ‘living machine’ expanded by green technology (solar panel, camera, Raspberry Pi computer) and by living technology: bacteria. The model incorporates bacteria as contributing agents, enabling the Intelligent Beehive to autonomously interact with the bees, mites and urban environment.



Intelligent Guerrilla Beehive
2016-2017

Resonances, Ispra/Milano
Leonarde da Vinci Acience & Technology museum

The bio-art project ‘The Intelligent Beehive’ imagines a new kind of beehive which is both a safe, healthy haven for swarming urban honeybee colonies as well as a device for monitoring their behavior. This long-term project has been an incredible source of inspiration for artistic research into issues of ecology, architecture and social sustainability of urban environments.
The Intelligent Beehive serves as a physical model for biological actions in conjunction with technological fabrication (3D printing, laser cutting, CNC milling). It is a ‘living machine’ expanded by green technology (solar panel, camera, Raspberry Pi computer) and by living technology: bacteria. The model incorporates bacteria as contributing agents, enabling the Intelligent Beehive to autonomously interact with the bees, mites and urban environment.

Variation Games, 2018

BEEHAVE - Miró Foundation Barcelona 2018, Research & Fieldwork 2015-2017

‘Variation Games’ is a video filmed with an infrared camera inside the beehive. Is is a condensed edit of a year-long observation of the behaviour of a bee colony and is revealing that community life for bees is based on networking, collaboration and collective intelligence.

Intelligent Beehive
2018

Exhibition Eco-Visionaries;
Installation at HeK (Haus der electronischen Künste),
Basel, Switserland.

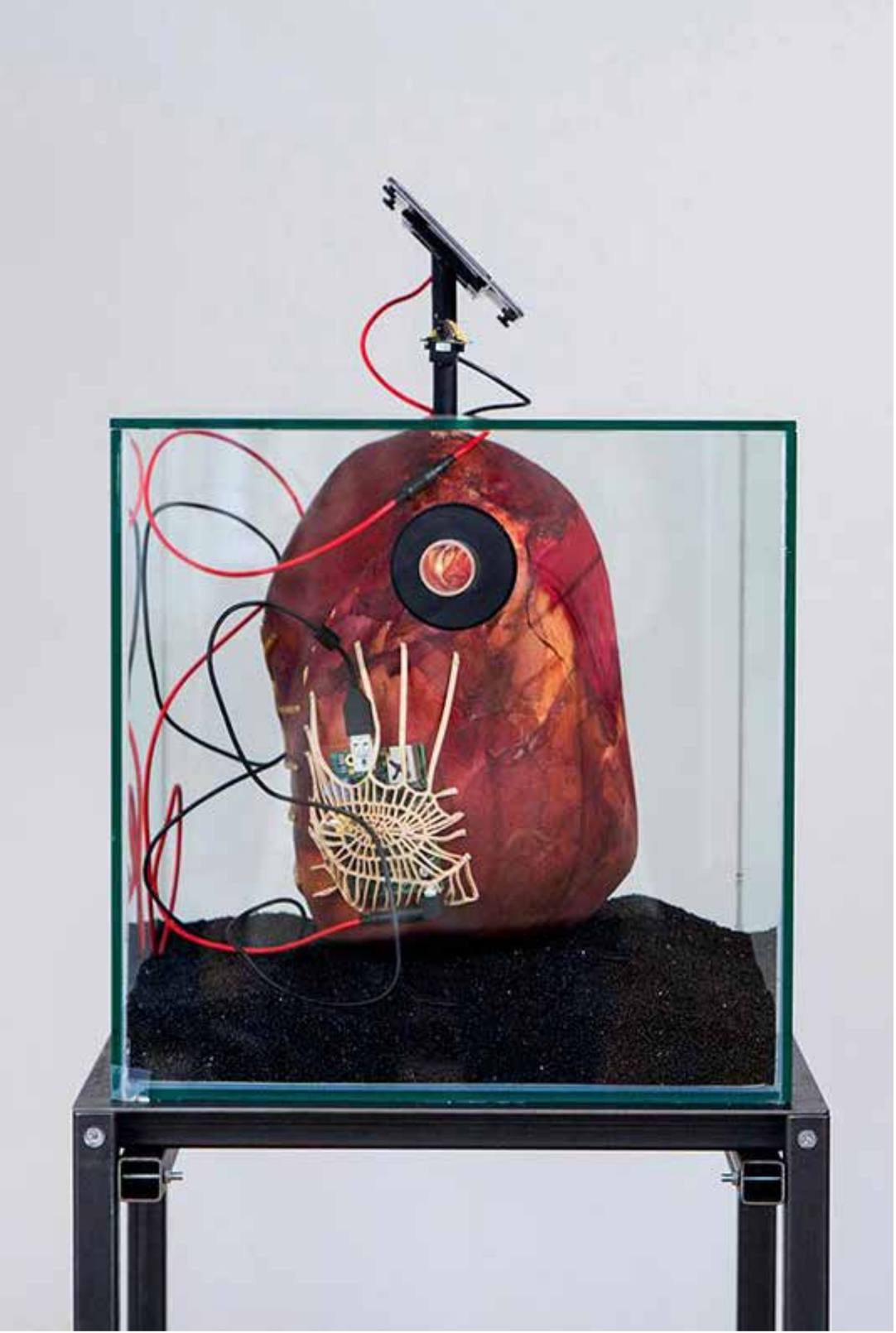
Laboratory for Form & Matter
2016

Stimuli & Glossa
2017

NOVA XX, St. Géry

Fine Dust Particle and Tip of the tongue of a HoneyBee.
Lightbox installation at Nova XX, St. Géry Brussels. Each 65cm x 165cm .

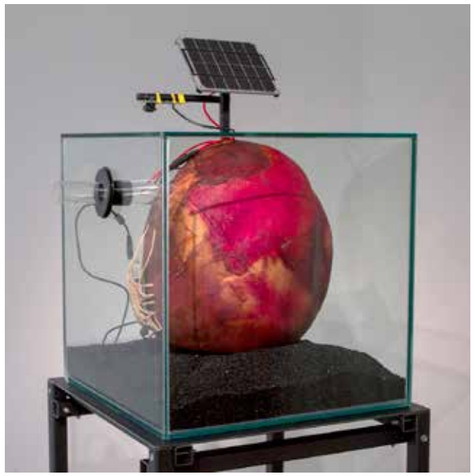
Nature produces morphologies down to the smallest detail. Collecting, analyzing and combining the details and richness of shapes help us to understand life and existence..
WThe Scanning Electron Microscope (SEM) recreates this reality, that is otherwise not visible to the naked eye.



Heart Beehive
2017

Bozar, Tendencies

The sculpture **'Heart Beehive'** is the result from the research into radically new beehives: the Intelligent Guerrilla Beehives.
On the Heart Beehive I explored the possibilities of smart organic materials: the microbial skin grown by bacteria, the possibilities of vegetal dying and bioplastics.
The aesthetics of the formal aspect in combination with DIY electronics for observing the bee colonies' behaviour and the use of new biomaterials (3D printed with FabLab machines or grown by micro-organisms) form a tight sustainable ecology.



Mirage Festival Lyon, 2019

Ecovisionarios , Laboral - Gijón, Spain

Bee Agency, 2020

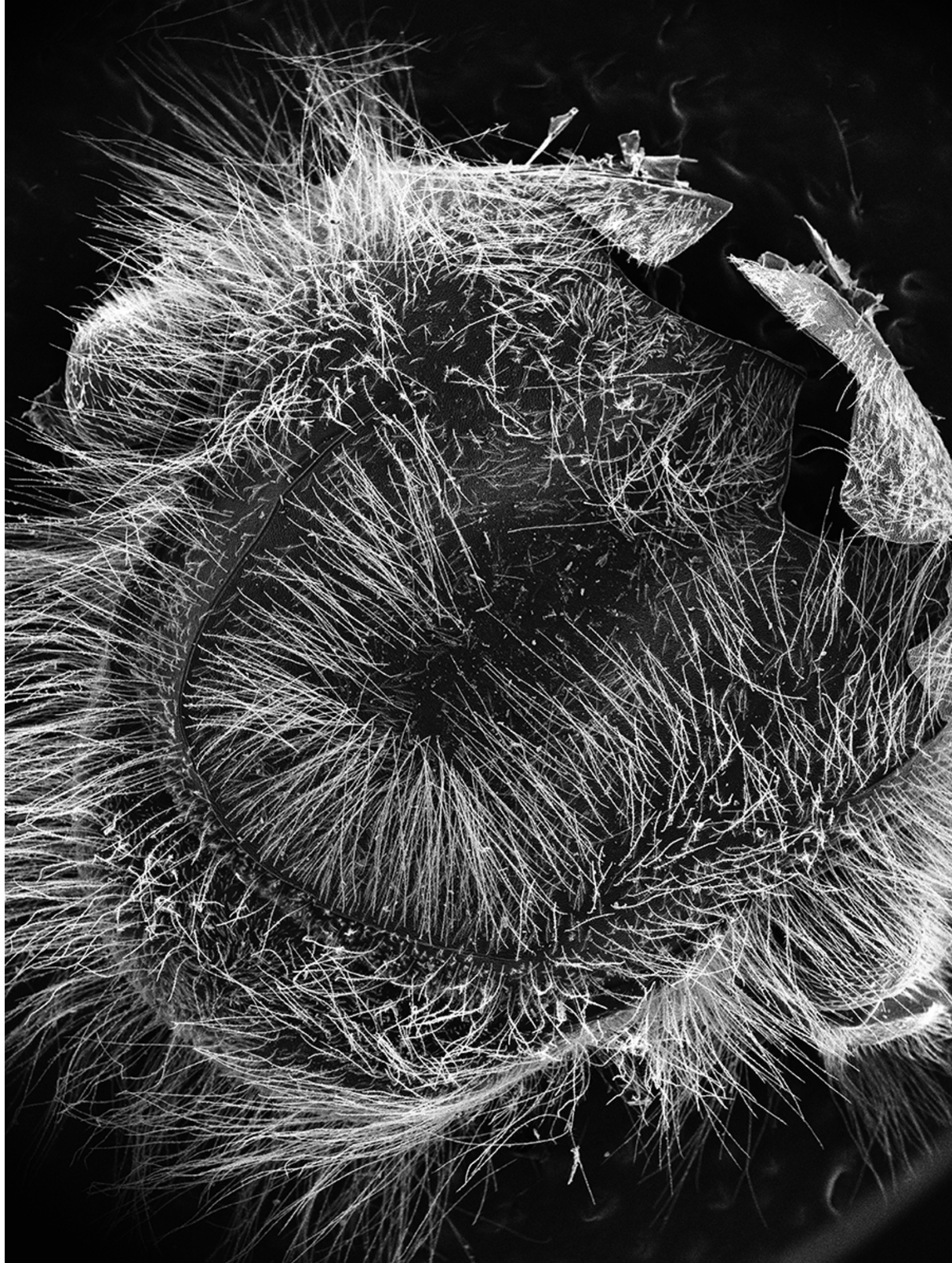
New Green Deal, Harelbeke, Belgium

How is artistic/scientific research used in the arts to draw attention to pressing ecological issues?
‘Bee Agency’, a sculpture in 2 parts, is an answer on the threat faced by pollinating insects. AnneMarie Maes studies the close interaction between pollinators and urban ecosystems while experimenting with a wide range of biotechnologies and organic materials. ‘The Intelligent Guerrilla Beehive’ is a radically new beehive designed for urban environments. It is offering an organic shelter to swarming bee colonies. This beehive is tailored to the needs of bee colonies ‘living in the wild’, in opposition to colonies that are domesticated by beekeepers. As such, the colonies can work on their own rythm and focus completely on their pollination tasks. This results in the preservation of the biodiversity on their foraging fields. With colour variations, the organic outer skin of the beehive is responding to external stimuli as fine dust particles and pesticides. As such it becomes a pollution sensor, sending out alerts in case of high risks.
‘Variation Games’ is a video filmed with an infrared camera inside the beehive. Is is a condensed edit of a year-long observation of the behaviour of a bee colony and is revealing that community life for bees is based on networking, collaboration and collective intelligence.

Caput [head]
2019

Nodine, Brussels

Since Darwin, it is clear that flowers and bees engage in an evolutionary race.
The honey bee is a complex insect with numerous sensorial features which are matching perfectly with the demands of sensual plants.
The black-and-white photograph **‘Caput [head]’** reveals the elaborate design of a dissected part of the honey bee. It shows in detail the wide variation of furs that cover a bee’s body, and in which pollen but as well pollution particles are transported to the beehive.
All samples were collected in the Urban Bee Lab, the artist’s apiary and rooftop garden laboratory in the centre of Brussels.



Bee Agency, 2018

MAAT (Museum Art Architecture & Technology) Lisbon, Portugal.

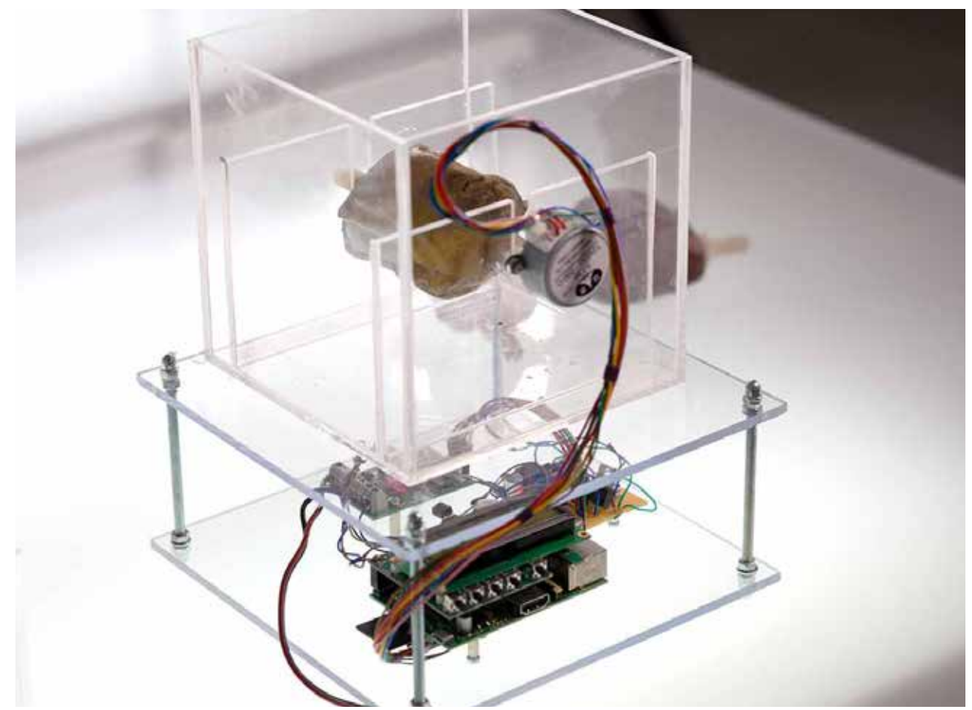
Un/Green, Rixc/Riga 2019

Research Biomimesis
2017-2018

I conduct most of my research in my open air laboratory, a garden on the rooftop of my artist studio. I study artistic practices in the post-digital and post-media era and I focus on the intersection of biology, ecology, technology and how these topics are linked to contemporary culture.
My recent research is fed by my interest in bacteria as a medium for artistic expression and by a certain fascination for natural structures and organic processes at microscopic level, such as the collaboration in bee colonies, quorum sensing in biofilms and the strength of fungi networks. The artistic precipitation of this research crystallizes in the creation of objects that concretisize my experiments with new organic materials.

Research Bacterial Biofilms
2017-2018

I conduct most of my research in my open air laboratory, a garden on the rooftop of my artist studio. I study artistic practices in the post-digital and post-media era and I focus on the intersection of biology, ecology, technology and how these topics are linked to contemporary culture.
My recent research is fed by my interest in bacteria as a medium for artistic expression and by a certain fascination for natural structures and organic processes at microscopic level, such as the collaboration in bee colonies, quorum sensing in biofilms and the strength of fungi networks. The artistic precipitation of this research crystallizes in the creation of objects that concretisize my experiments with new organic materials.



Bee Agency
2019

Exhibition ‘Turbulences’
Installation at Mirage Festival, Lyon, France.

‘BEE AGENCY is a dynamic project of interrelated organic and bio-technological processes. It is living art, it is a system developing in harmony with its environment.’

Moebius
2016

A Moebius-strip was printed with natural resin in a 3D printer and than put in a beehive.
The bee colony started to built waxcomb on this 3D structure.
As such, a high-tech 3D print is combined with a natural 3D print made by the bees.
We can see this **'Moebius'** artwork as an example of bio-mimesis, advanced technology inspired by nature.

SENSORIAL SKIN

Sensitive Skins
2016

The Laboratory for Form and Matter is my artistic research project at the intersection of biology, ecology and contemporary culture.
The research is fed by my interest in bacteria as a medium for artistic expression and by a certain fascination for natural structures and organic processes at microscopic level, such as swarm intelligence, the collaboration in bee colonies and the strength of fungi networks.
The artistic precipitation of this research crystallizes in the creation of objects that concretisize my experiments with new organic materials.
The installation **'Sensitive Skins'** displays a selection of bacterial grown skins in different colors.
All fabrics are dyed with vegetable matter.

Sensorial Skin

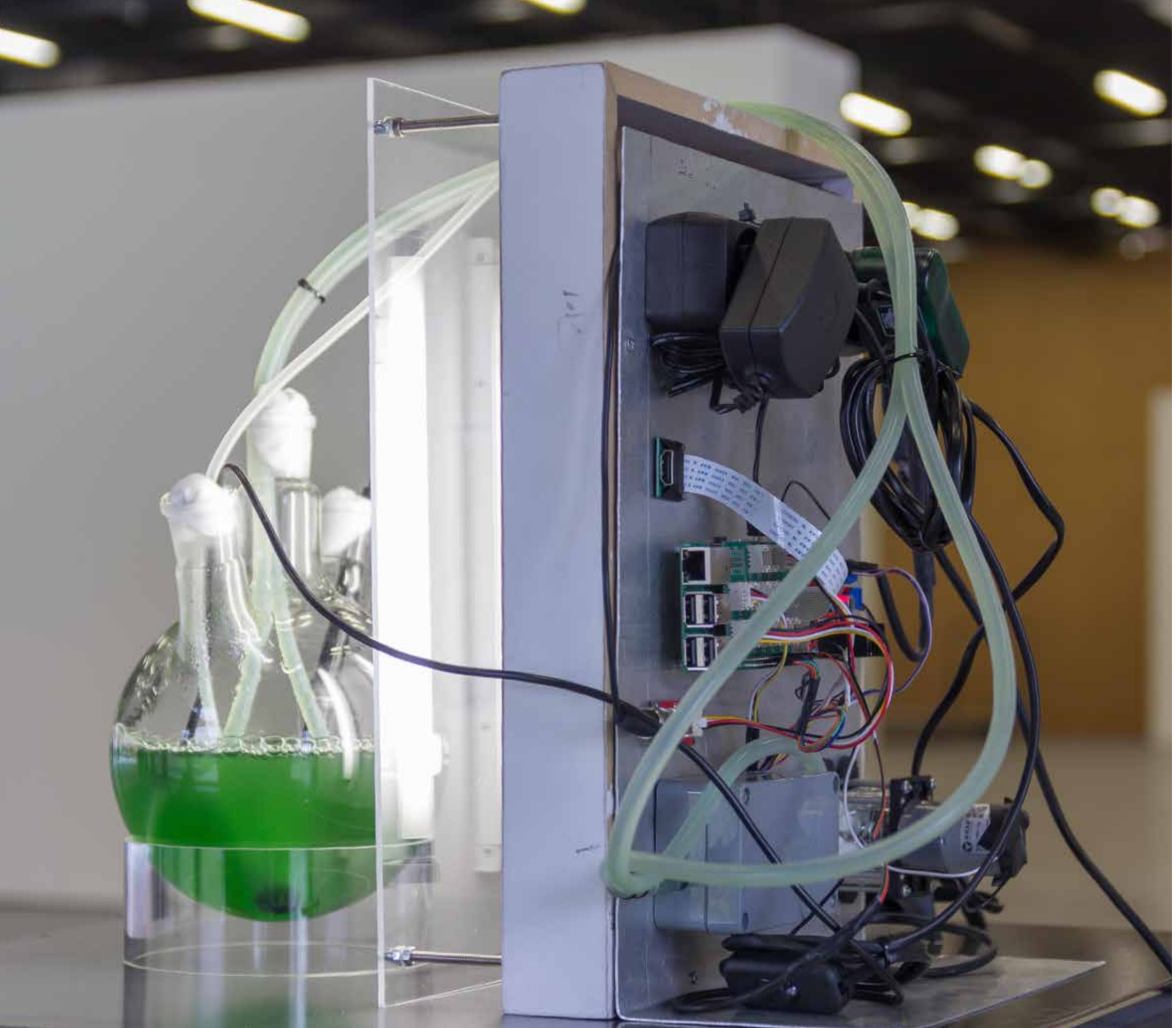
2016

‘Sensorial Skin’ is a series of macro photographs of microbial grown skins.
The skins are grown by Acetobacter xylenum bacteria and yeast cells in a medium of green tea and sugar.
The micro-organisms create a flexible biofilm to protect the growth medium.
Once the film is harvested and dried, it feels like a second skin and it has the strength and impermedable properties of leather.

Curtain, 2016

Suspended microbial cellulose fabrics presented in front of a backdrop of neon lights. (200cm x 200cm, total).

The concept of making and producing sculptures and textiles is as a form of study.
The artistic process happens in layers and is linked to the action of subtracting and adding. The concept of scale is very important.
The volume of an object and its relationship with nature (micro/macro) are essential elements of my work.
The choice of materials is a primary aspect of my artistic research. I always work with natural and organic components, and I create often in collaboration with living organisms as bees, bacteria and plants.
The physical and aesthetic features of the materials I work with determine the forms of the individual modules, sculptures or textiles.
The sculptures and textiles are appealing to touch and smell, but as well they attract the spectator in an aesthetic, rhythmic and visual way.



Cyanobacteria Research

2019-ongoing

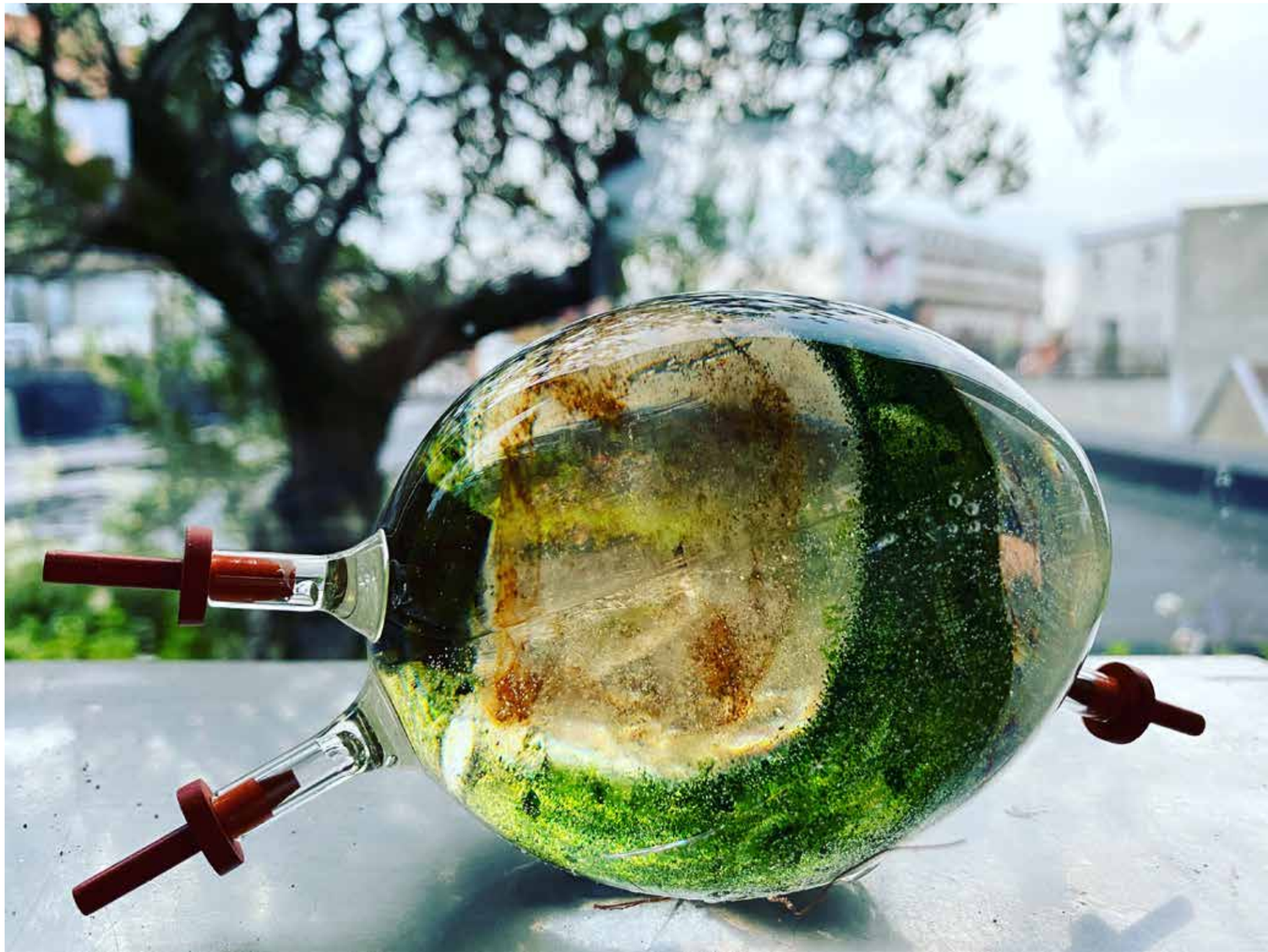
Seeing Together, KASK - Ghent

Art/Science collaboration with the Open BioLab at Erasmus Hogeschool Brussels and with the Hybrid Forms Lab of Prof. Raoul Frese (biophysics) at the Vrije Universiteit Amsterdam. Research into the possibilities to use biofilms of Cyanobacteria as a sensor to visualize the pollution in urban environments, with the honeybees as mediators.

L'Origine du Monde
2020

The New Green Deal, Harelbeke

'L'Origine du Monde' is an artistic representation of research into the possibilities of cyanobacteria and micro-algae as source for renewable energy and novel biodegradable materials.
The installation shows a strongly enlarged bacterial chain made from glass cells. Every cell is filled with cyanobacteria producing realtime photosynthesis.
Together they form a complex microbial population that communicates via quorum sensing and cleans the air from CO2 whilst producing biopolymers.

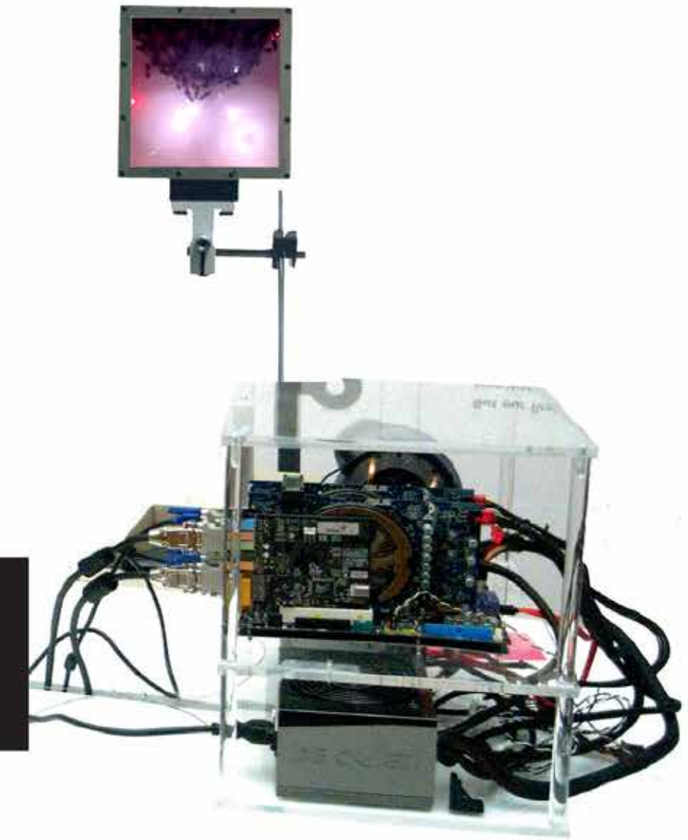


CONNECTED OPEN GREENS

Peephole, 365 days
Observer 2.1
2012

ALOTOF Festival, Brussels

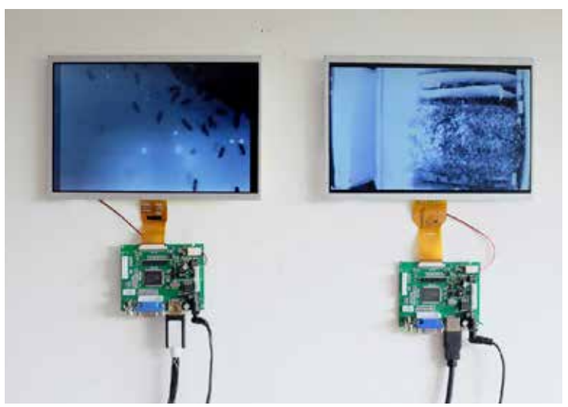
During 10 months I studied a colony's development from scratch: from a late-spring swarm till the new spring one year later. Two webcams filmed continuously in the beehive, day and night.
During this period, the camera-images were streamed (by a custom made computer, 'Observer 2.1) in real time towards videoscreens mounted in my studio.
The resulting videofiles were later accelerated and compressed into 1 file of 11hours 35 minutes.
For exhibitions, this long videofile is presented in a box with a peephole, in respect to the private life of the honeybees and their actions inside the beehive.



The Invisible Garden
2014-2015

The Green Light District, Buda Kortrijk

The Invisible Garden / l'Orto Invisibile. Naturalistic Observations and Hidden Memories. is a large-scale art installation in the exhibition *the Green Light District*. The indoor garden is a remake of the Edible Forest Garden, the Open Air Laboratorium created by the artist AnneMarie Maes on her rooftop in the center of Brussels. The Invisible Garden is a sitespecific project that reverses the relation between nature and art. The transitions between inside and outside, culture and staged nature, become fluid and transitory.
The 3 months of the Green Light District exhibition (Nov. Dec. Jan. Feb. 2014-2015), the Invisible Garden became the artists' research lab and her work gaves rise to fascinating images, videos and useful ecological data of life in a biosphere. And moreover, it was a strong eco-political statement.



Sound Beehive
2015-2016

The Sound Beehive Experiment monitors the development of a bee colony on the basis of the sounds it generates. For this purpose, I developed a beehive that is equipped with sensors, microphones and cameras.
The beehive is a bespoke model which I constructed in the FabLab.
It is augmented with electronics as infrared cameras and microphones. The Sound Beehive is installed in my field laboratory, on a rooftop connected to my studio in the Brussels city center.
Aside from the biological study of the collective behaviour of the bees, the goal of the research is to make artworks, making use of the data collected from observing them.

Scaffolded Sound Beehive
2015

Artes, Buenos Aires, Argentina

The scaffolded beehive is an immersive multi-media installation which provides viewers an artistic visual and audio experience of activities in a beehive. The centerpiece of the installation is the top of a Warré beehive constructed using open source digital fabrication and mounted on scaffolds. The hive is 2.5 m high so that visitors can put their head inside it and experience a visual and auditory artistic interpretation of hive activity. An 8-channel sound installation plays continuously inside the hive. This sound installation is based on recordings of actual bee and environmental sounds in the broodnest of an urban beehive installed on the roof top of the Brussels Urban Bee Laboratory for a complete season. It started with recordings on June 21st 2014, the longest day/shortest night, processed using sophisticated pattern recognition algorithms, and artificial intelligence analysis software, and edited into a 15 minute-piece by adding swirling electronic sound clusters to sonify the increase and decrease of swarm activity in the hive.
A video shows 365 days of activity inside a real observation beehive, played back at higher speed. The images were recorded with an infrared camera inside the hive and processed using pattern recognition, AI and computer graphics algorithms. These images give a stunning visual experience of a colony in action. A second video shows a graphical rendering of AI analysis of colony behavior combining real audio data with measure-ments of microclimate inside the hive: temperature, CO_2 and humidity.

ElbBienen / Elbe Bees
2019 - 220

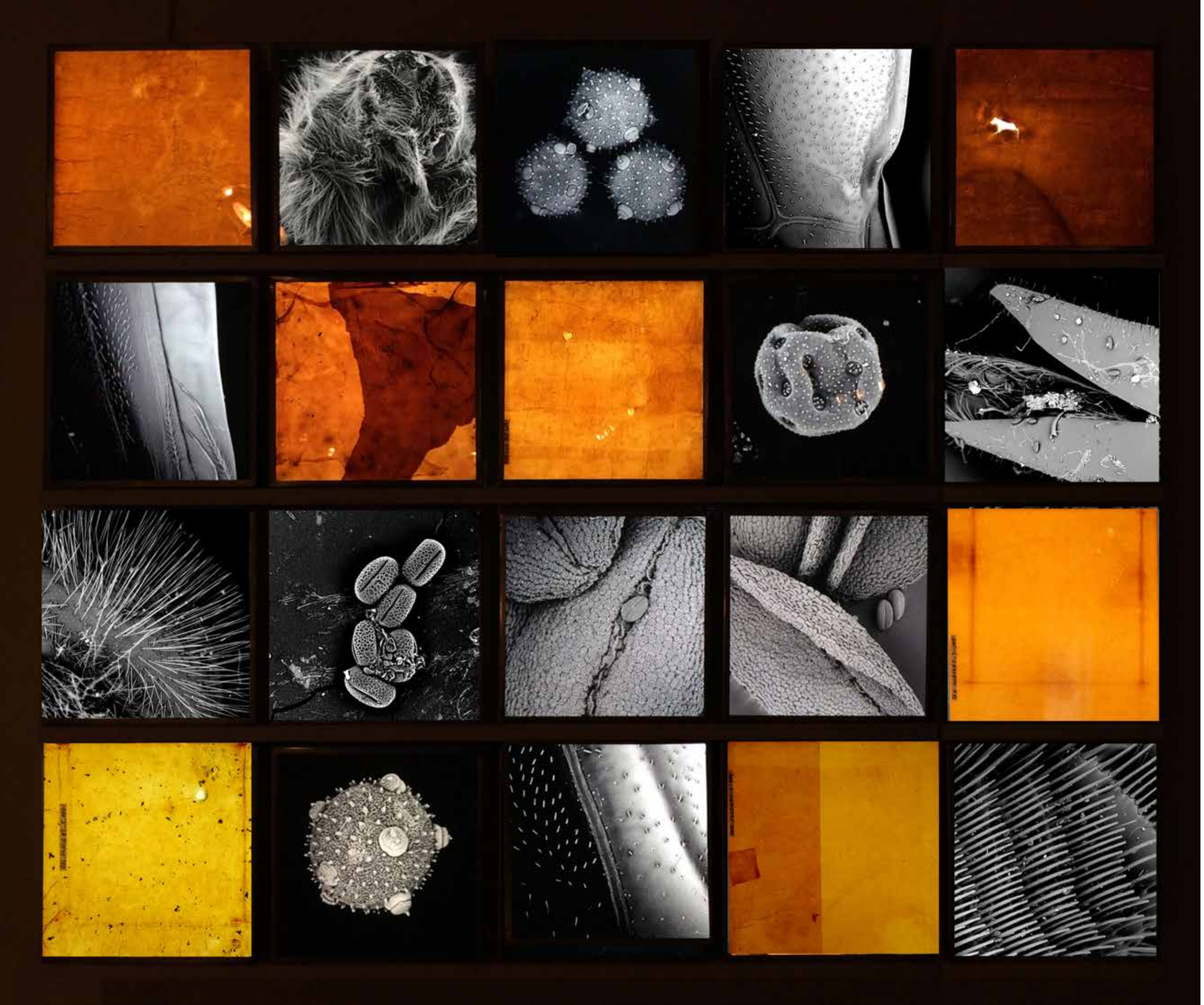
Art in Public Space program of the city of Hamburg.

The commissioned version of the Intelligent Guerrilla Beehive is the ElbBienen-project. It is a bio-tech installation customized for public space in Hamburg.
The ElbBienen-beehive is installed on top of mooring piles in the Elbe river at the Entenwerder Golden Pavilion, close to the harbour of Hamburg. It is populated with a bee colony, and it will remain on the spot for at least 1 bee-season (up to autumn 2020).
The Hamburg Beehive has an identical sister-beehive in Brussels. This one is installed in the Open Air Lab of the artist, on the rooftop of her studio. Both beehives are enhanced with electronics, cameras and sensors to monitor the behaviour of the bees in relation to the environment in which they forage.

Flat Pollen
Bacterial Mantarey
2018

Citygate, Brussels

A biofilm is an association of micro-organisms in which microbial cells adhere to each other on a living or non-living surface. Biofilm formation is a cooperative group behaviour. The bacteria communicate via quorum sensing (a system of stimuli and response), a cell to cell communication mechanism that synchronizes gene expression in response to population cell density.
Quorum Sensing: the language of Bacteria (research Bonnie Bassler)



Alien Intelligence II
2019

'Alien Intelligence II' focuses on my research where I study the relation between honeybees, bacteria and the urban environment.
It is a composition with 20 lightboxes (26cm x 26cm x 10cm each) containing black/white micrographs of pollen grains and honey bee parts, mixed with colourful cellulose fabrics that are grown by bacteria and colored with vegetal dyes.
All samples of bees (wings, tongue, eye, fur hairs, …) and pollen grains (mint, courgette, sunflower, borage, …) were collected in my urban rooftop garden/lab.
The pigments used for coloring the microbial celluloase fabrics are extracted from the same plants as the ones on which the bees were foraging.

Flightroutes; Trail Explosion; Pollen Database

2016

With these video installations I want to give a critical comment to spark the discussion on Urban Ecologies and the disappearance of the Honeybees, hereby emphasizing the importance of experimentation and continually evaluating what is possible in a close collaboration between scientists and artists, and between interdisciplinary fields of biology, computer science and design.

Left: Flightroutes (2016)
Right, top: Trail Explosion (2014)
Right bottom: Pollen Database (2015)

LABORATORY FOR FORM AND MATTER

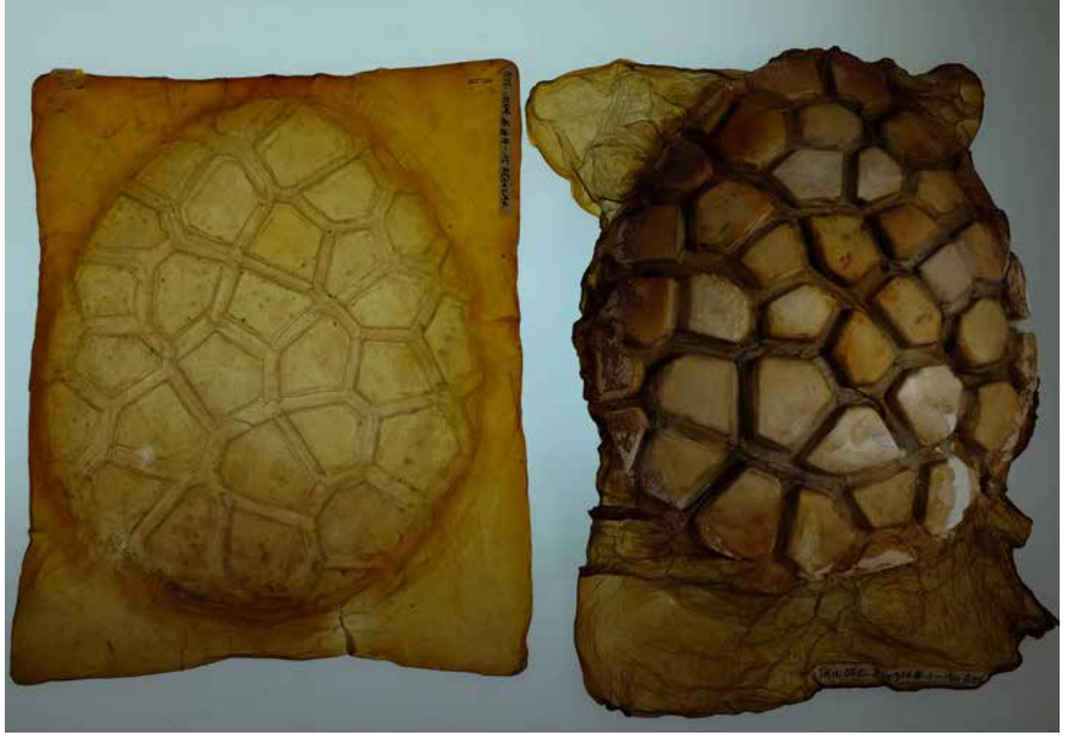
Research BioPlastics and Bacterial Cellulose

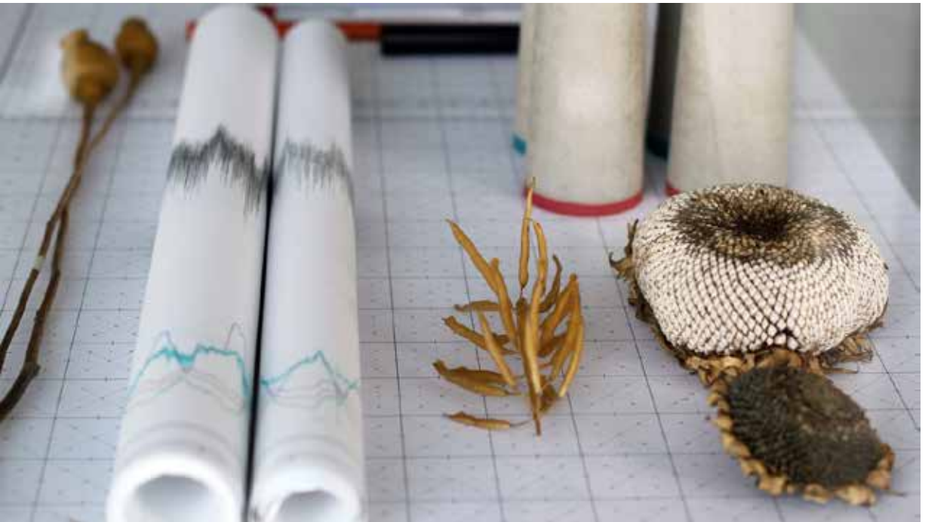
2017-2018

I conduct most of my research in my open air laboratory, a garden on the rooftop of my artist studio. I study artistic practices in the post-digital and post-media era and I focus on the intersection of biology, ecology, technology and how these topics are linked to contemporary culture.
My recent research is fed by my interest in bacteria as a medium for artistic expression and by a certain fascination for natural structures and organic processes at microscopic level, such as the collaboration in bee colonies, quorum sensing in biofilms and the strength of fungi networks. The artistic precipitation of this research crystallizes in the creation of objects that concretisize my experiments with new organic materials.

Alchimia Nova
2019

I am exploring the possibilities of microalgae as pollution cleaners. Microalgae and cyanobacteria are the precursors of the chloroplasts in green plants. With the help of solar energy they absorb the CO2 in the air and they give us clean O2 (oxygen) in return. In the **'Alchimia Nova'** project I am culturing living algae in a bottle that can easily be worn on the body as a jewel. With their reverse metabolism, the microalgae are complementary to our human metabolism.
In a symbiotic action, the human and microalgae create a favorable and balanced environment for both.

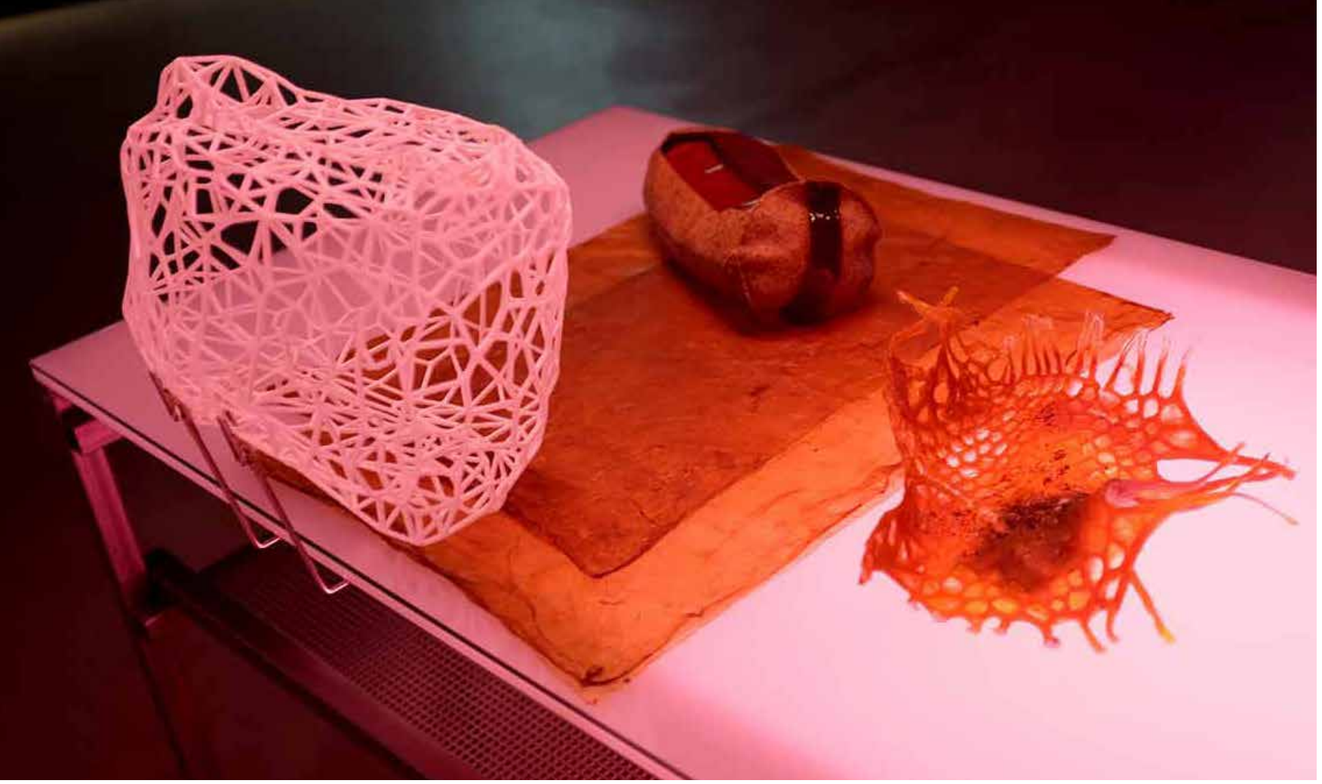




Laboratory for Form & Matter
2014

Koç Gallery, Istanbul - 2014

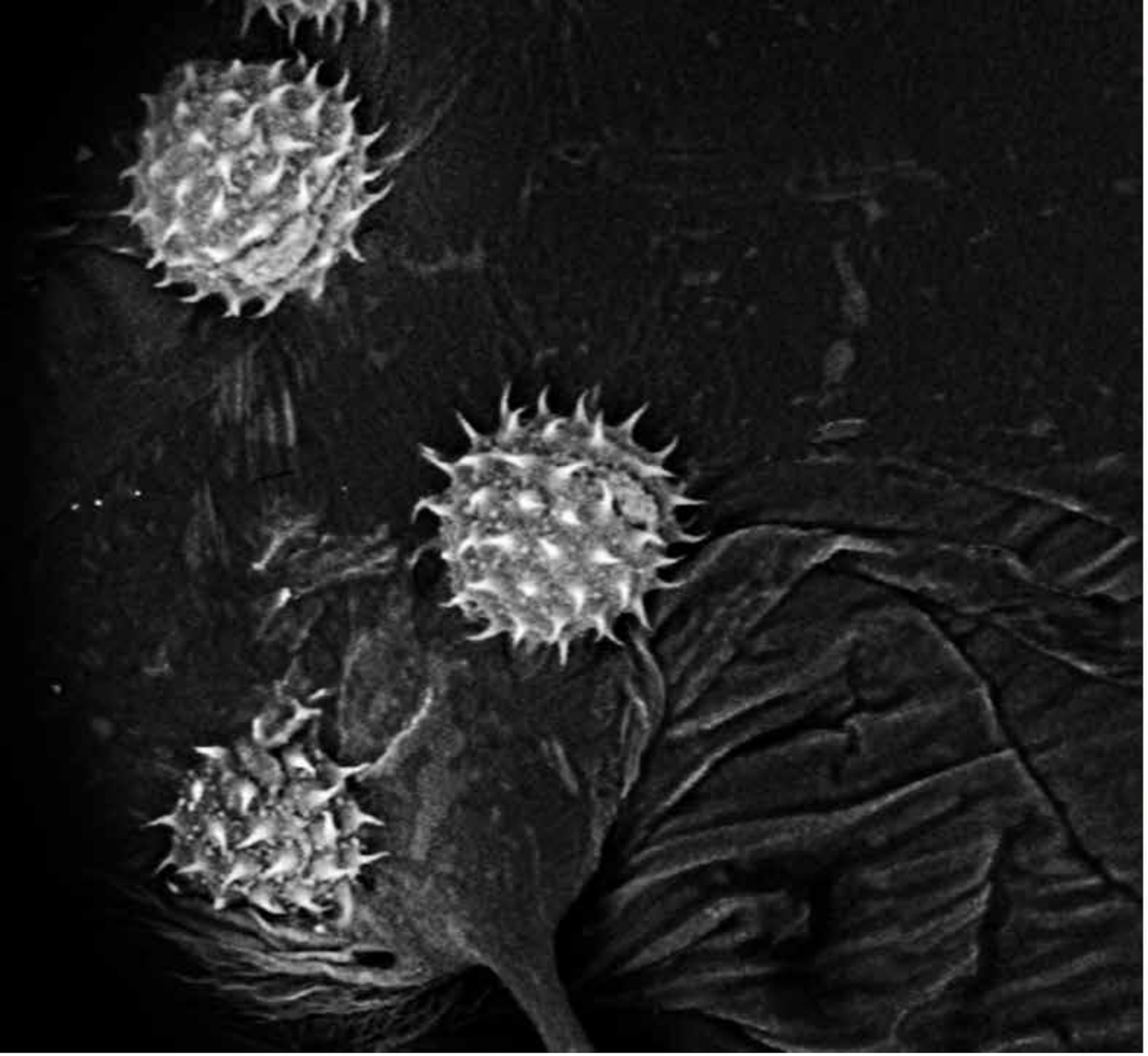
The Laboratory for Form and Matter is a research project into artistic practices in the post-digital and post-media era. It is situated at the intersection of biology, ecology, technology and contemporary culture.
The research is fed by my interest in bacteria as a medium for artistic expression and by a certain fascination for natural structures and organic processes at microscopic level, such as the collaboration in bee colonies and the strength of fungi networks.
The artistic precipitation of this research crystallizes in the creation of objects that concretisize my experiments with new organic materials.
This installation displays a selection of microbial grown skins in different colors. All fabrics are dyed with vegetable matter.



Laboratory for Form & Matter
2016-2020

Hek, Basel, Switserland - *Laboral, Gijón, Spain*

The Laboratory for Form and Matter is a research project into artistic practices in the post-digital and post-media era. It is situated at the intersection of biology, ecology, technology and contemporary culture. The research is fed by my interest in bacteria as a medium for artistic expression and by a certain fascination for natural structures and organic processes at microscopic level, such as the collaboration in bee colonies and the strength of fungi networks. The artistic precipitation of this research crystallizes in the creation of objects and installations, and by giving workshops, presentations and performances.



The Smell of the Hive 2019

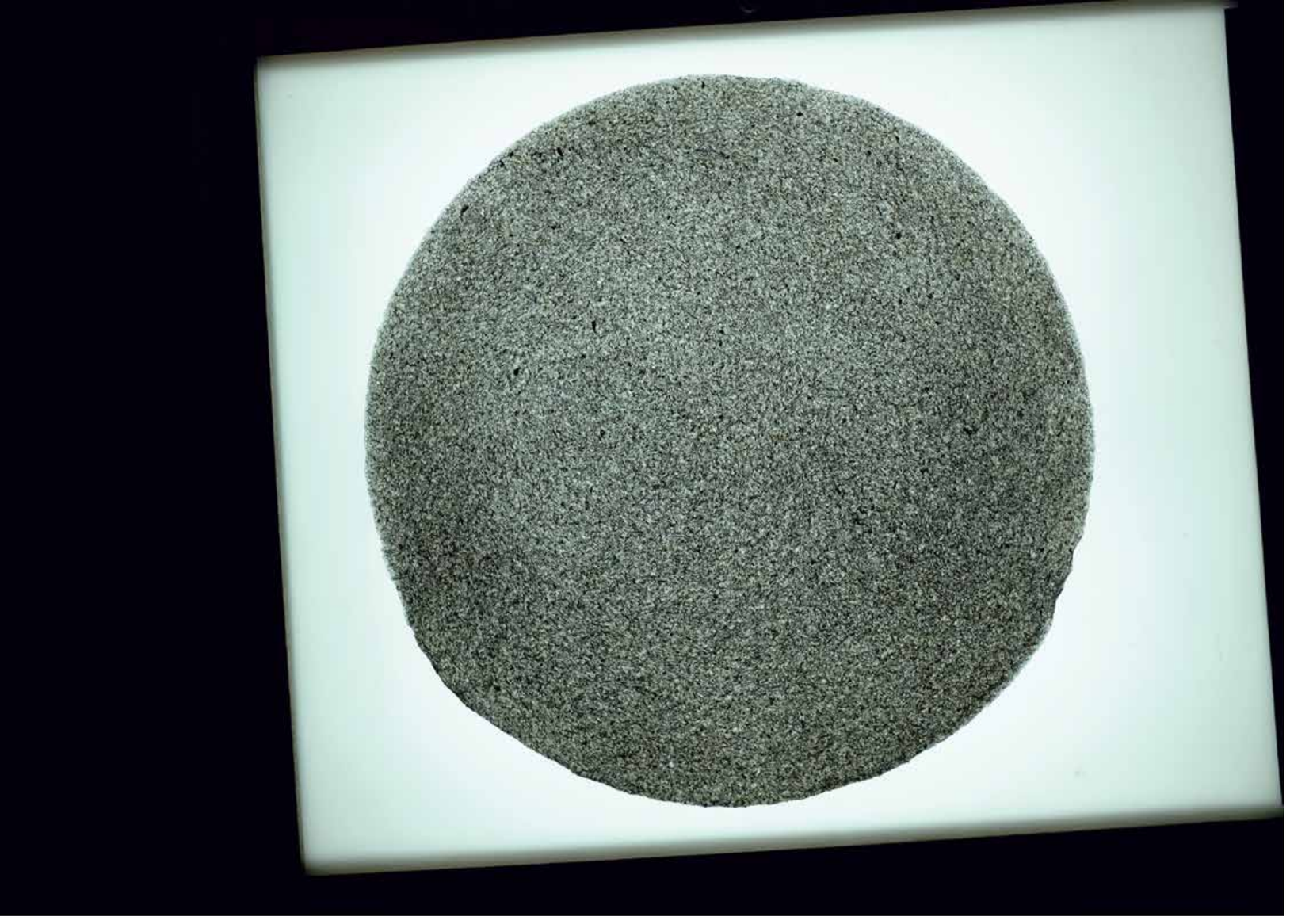
Every beehive has its own very specific smell. With **'The Smell of the Beehive'** I have created a perfume through multiple distillation processes of five core elements of the beehive: pollen, nectar, wax, propolis and bees.
They are mixed in appropriate proportions to recreate the delicate, warm and sweet smell that we detect intside the beehive.

Laboratory for Form & Matter
2016

The Laboratory for Form and Matter is a research project into artistic practices in the post-digital and post-media era. It is situated at the intersection of biology, ecology, technology and contemporary culture.
The research is fed by my interest in bacteria as a medium for artistic expression and by a certain fascination for natural structures and organic processes at microscopic level, such as the collaboration in bee colonies and the strength of fungi networks.
The artistic precipitation of this research crystallizes in the creation of objects that concretisize my experiments with new organic materials.
This installation displays a selection of microbial grown skins in different colors. All fabrics are dyed with vegetable matter.

Research Pigmented Bacteria
2017-2018

I conduct most of my research in my open air laboratory, a garden on the rooftop of my artist studio. I study artistic practices in the post-digital and post-media era and I focus on the intersection of biology, ecology, technology and how these topics are linked to contemporary culture.
My recent research is fed by my interest in bacteria as a medium for artistic expression and by a certain fascination for natural structures and organic processes at microscopic level, such as the collaboration in bee colonies, quorum sensing in biofilms and the strength of fungi networks. The artistic precipitation of this research crystallizes in the creation of objects that concretisize my experiments with new organic materials.



Black Cirkle
2016

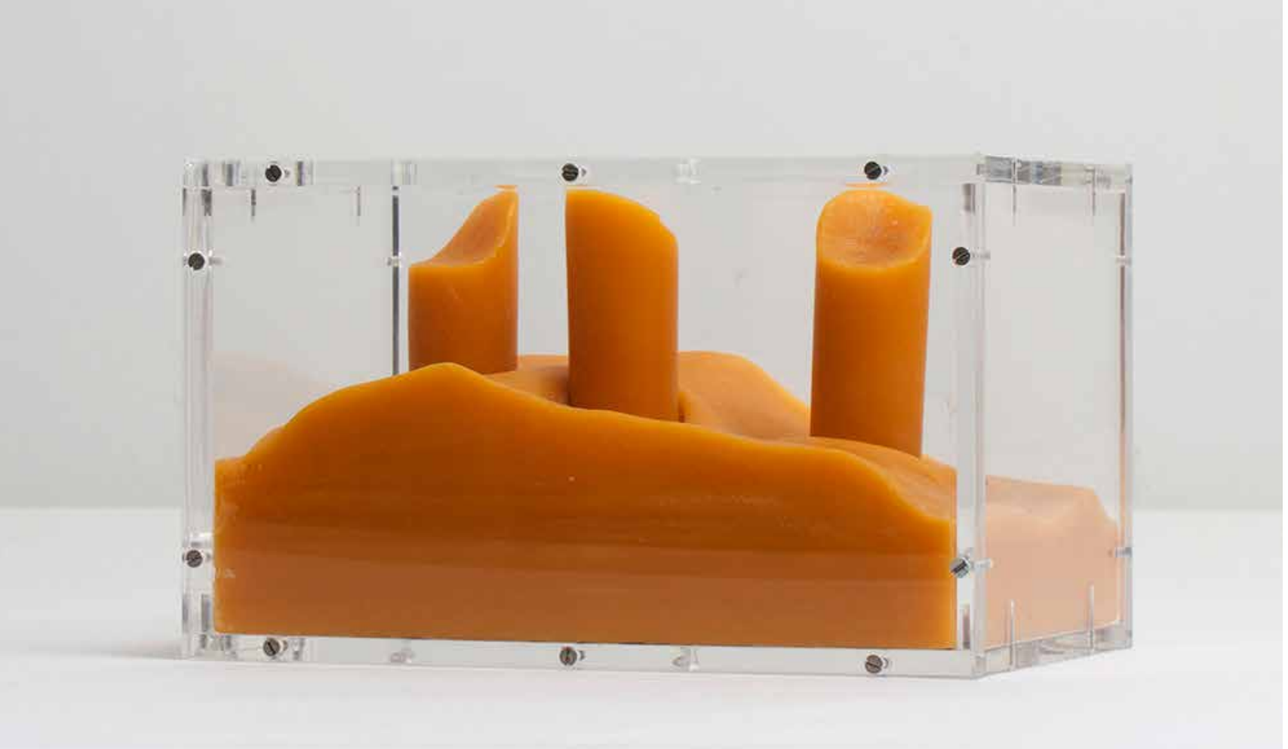
Installation at Sonicville - exhibition Sensorial Skin.
Plantbased fabric on overhead projector.

Wall Textile
(Green & Orange)
2019

Disrupted Sensations
2019

Lightbox Series with Sensorial Skins and SEM Micrographs ▪
(26cm x 26cm x 10cm each)

Composition with organic elements (microbial cellulose, fish skin, bioplastics, natural pigments) and Scanning Electron Micrographs (SEM) of pollen and bee-parts.



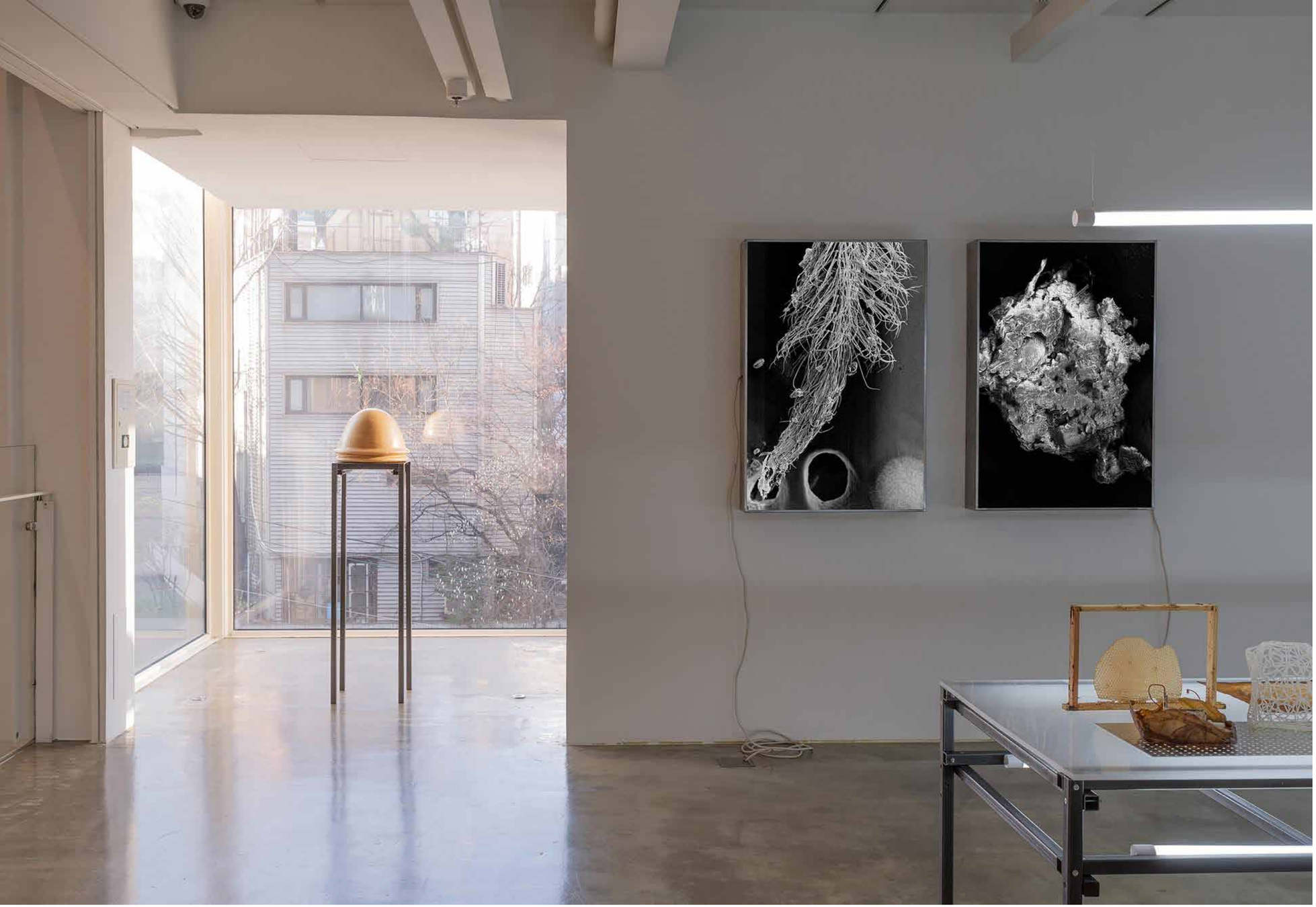
Honey batteries ; North/West/South/East
2015

The Sound Beehive Experiment monitors the development of a bee colony on the basis of the sounds it generates. For this purpose, I developed a beehive that is equipped with sensors, microphones and cameras.
The beehive is a bespoke model which I constructed in the FabLab. It is augmented with electronics as infrared cameras and microphones. The Sound Beehive is installed in my field laboratory, on a rooftop connected to my studio in the Brussels city centre. Aside from the biological study of the collective behaviour of the bees, the goal of the research is to make artworks, making use of the data collected from observing them.

The Laboratory for Form & Matter
2017

Bozar, Generation Z

The Laboratory for Form and Matter is a research project into artistic practices in the post-digital and post-media era. It is situated at the intersection of biology, ecology, technology and contemporary culture.
The research is fed by my interest in bacteria as a medium for artistic expression and by a certain fascination for natural structures and organic processes at microscopic level, such as the collaboration in bee colonies and the strength of fungi networks.
The artistic precipitation of this research crystallizes in the creation of objects that concretisize my experiments with new organic materials.
This installation displays a selection of microbial grown skins in different colors. All fabrics are dyed with vegetable matter.



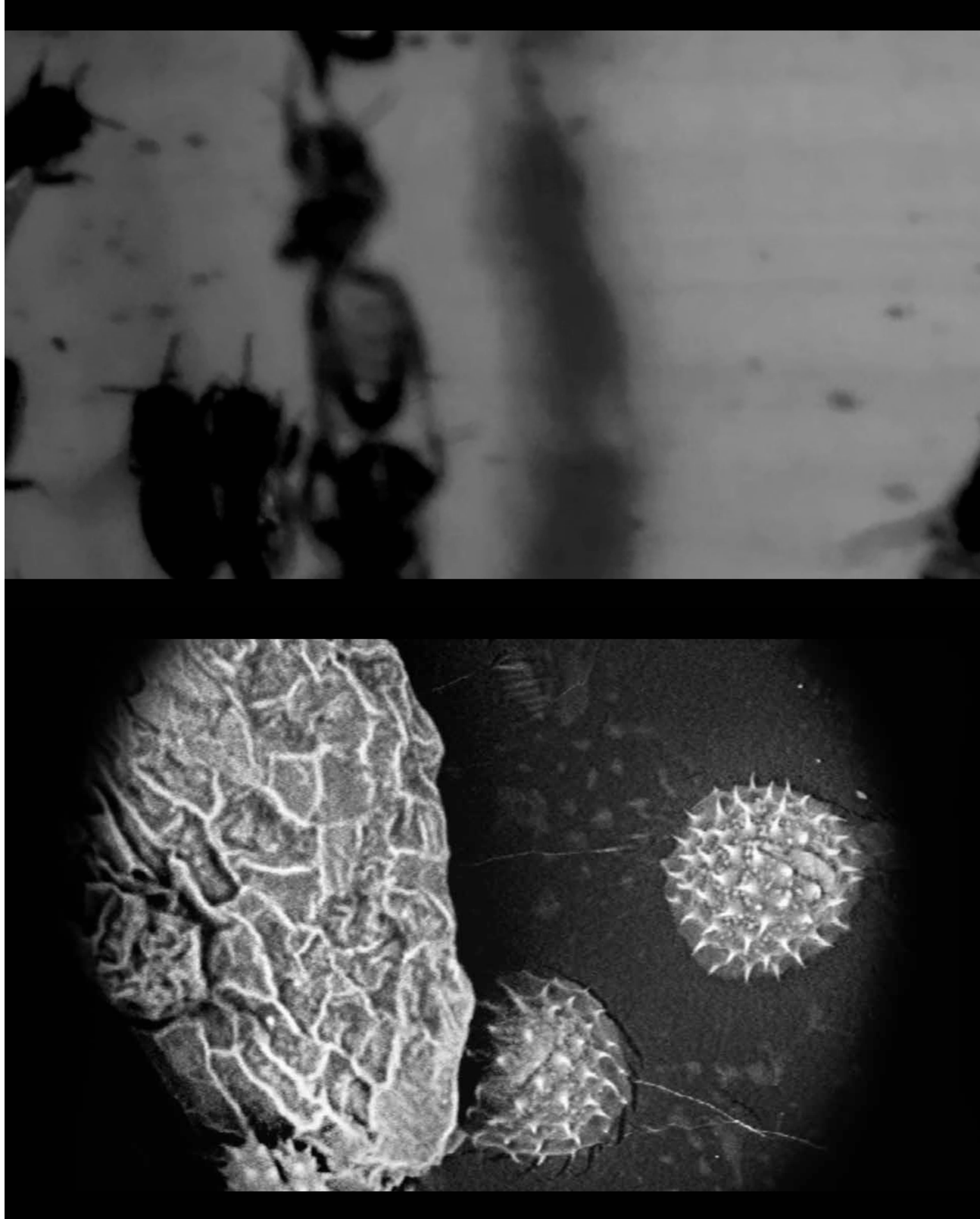
Future Archaeology
2019

Imagining Cities Beyond Technology 2.0',
Seoul, South Korea.

Future Archaeology is set up as a Cabinet of Curiosities.
Every object on the laboratory tables is the outcome of a particular experiment. The bizarre biomorphic artifacts add an uncanny rhythm to the installation, which stands in stark contrast to the strict geometry of the laboratory architecture bathing in white light: hard and soft oppose each other.

Variation Games, video
2018

Variation Games are games where the set of rules is constantly adapted by the players.
The bees act as transmitters in an interconnected web of bio-intelligent agents. They construct a bioremedial beehive and create a symbiotic environment for exchange with specific bacteria.
They are sentient, perceptive; they see, feel, navigate and communicate. They fabricate and dance, they collect and build, they perform and reproduce. The result of this collaboration is a biotechnological device: the Intelligent Guerrilla Beehive.
The video is a condensed edit of a year-long audiovisual observation of the behaviour of a honeybee colony in the private environment of their refuge. The recordings are made with an infrared camera and contact microphones inside the beehive. The content of this video focuses on the first 6 weeks of the observation, when the bees start the building of their nest. We see a demonstration of decision-making, networking, collaboration and collective intelligence. The soundtrack is based upon recordings made in the beehive. This video throws the viewer out of his comfort-bee-zone, and shows the colony in action from an unusual point of view.



Alchimia Nova, video
2019

Alchimia Nova (10'37''), is filmed in the studio and in the open air laboratory of AnneMarie Maes.
The video gives an overview of the research and the different disciplines used (biomimetism, smart materials, digital techniques, biotechnology, electronics) for the development of the 'Sensorial Skin for an Intelligent Guerrilla Beehive' project.

https://annemariemaes.net
annemarie@annemariemaes.net
+32 475 511895