

# L'ERE NOUVELLE

ENVIRONMENT - ART - DIGITAL - WELL-BEING  
EDITION#12, HS ARTIFICIAL INTELLIGENCE - JANUARY 2023

## OMNIPRESENT

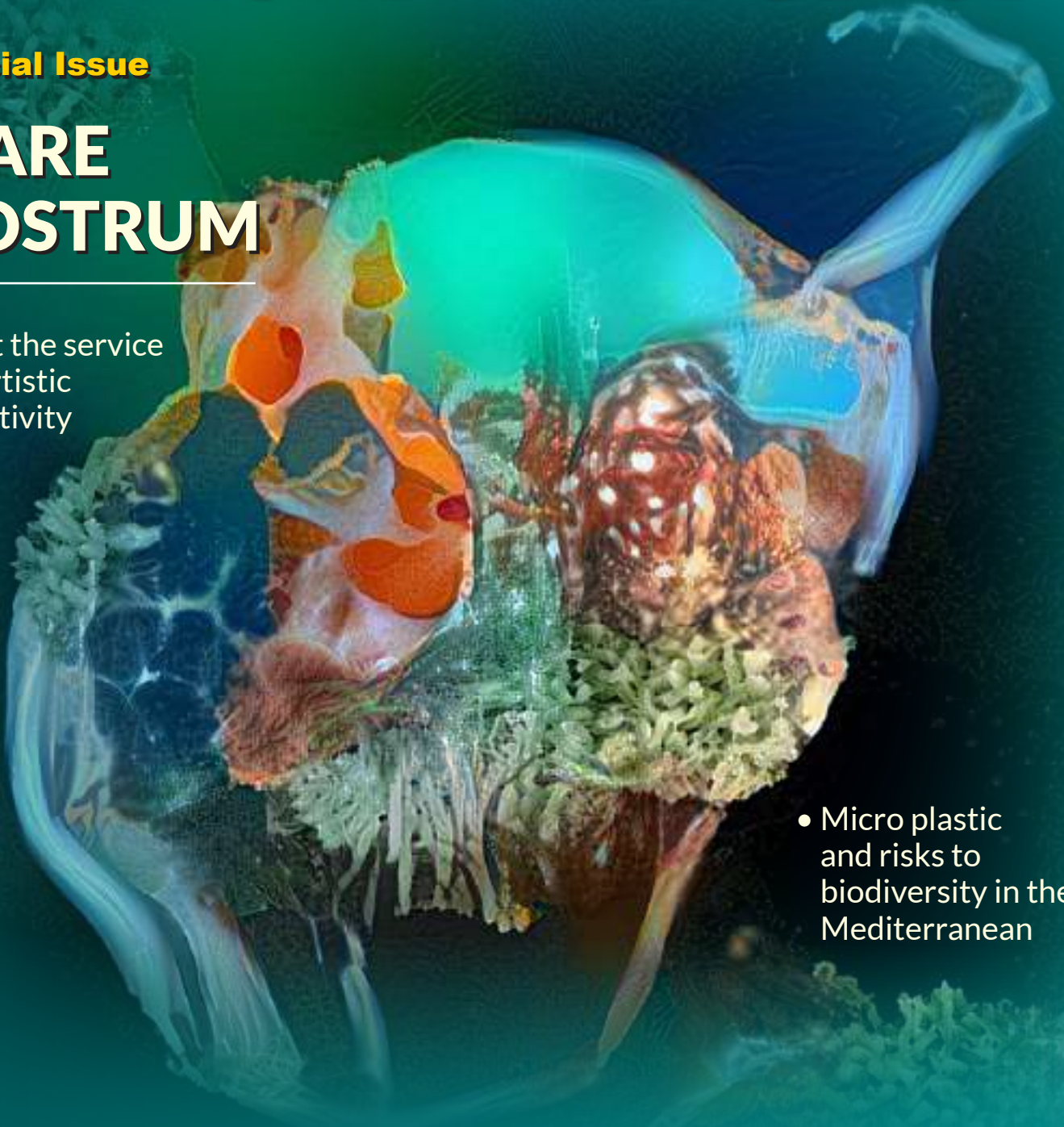
### ARTIFICIAL INTELLIGENCE

Special Issue

## MARE NOSTRUM

- AI at the service of artistic creativity

- Micro plastic and risks to biodiversity in the Mediterranean



# Meeting between Art & Technology



Within the framework of WAICF,  
**Diana Vicinelli Landi**<sup>1</sup>  
AI & Art expert from the EurolA Institute &  
president of Art-tech  
presents **3 projects**:



## Mare Nostrum



Un link between Science,  
Art and TechnologAI  
**Pages 4 to 17**

## NEFFIE



Art, Future & Artificial  
Intelligence  
**Pages 18 - 19**

## Metaverse



Virtual Universe of  
yesterday and today  
**Pages 20 - 23**

<sup>1</sup>Currently president of the Art-tech association <https://diana-art.net/> Diana Vicinelli Landi is an AI & Art expert for the EurolA Institute. Mathematician, former university professor, Diana is a writer and artist. With 30 years of experience in intercultural management related to the technological world, she is in her own way a futuristic artist who helps her interlocutors to discover the changes to come, to innovate.

# ÈRE NOUVELLE

M A G A Z I N E

EDITION #12, JANUARY 2023

Chief editors Nelda Lapostat  
Claude-Jean Lapostat

Graphic design Dominique Martinez

Contributors Nelda Lapostat  
Olivier Barbarin  
Alberto Baudena  
Florence Canarelli  
Tommaso Occhipinti  
Diana Vicinelli Landi

**The New Era Magazine**  
- January 2023 -

QuantaEdition Association  
826, Chemin de la Chèvre d'Or  
06410 Biot-Sophia Antipolis  
+33(0)7 86 56 02 13 / +33(0)4 93 655 500  
Email: [erenouvellebioresonance@gmail.com](mailto:erenouvellebioresonance@gmail.com)

N°ISSN : 2606-5886

Suscriptions for 5 numbers : 30€ per year  
Creation of the magazine: September 2007  
Edition of 1000 copies

National Distribution

The wordings in the advertisements, photos and written texts are the responsibility of their authors. The Publisher reserves the right to defer or refuse documents without having to justify any reasons. The Publisher declines all responsibility for errors or omissions, typographic or printing errors which would remain despite all the care taken to its making. Any reproduction, even partial of the articles, drawings and publicity is forbidden, unless agreed with the Publisher.

Warning: Advices given in this magazine must neither lead to the interruption of an ongoing medical treatment nor replace a doctor consultation.



## Editorial

A breath of fresh air is blowing on the Ère Nouvelle magazine. This magazine, whose essence is above all the preservation of well-being, has decided to open its pages to ecology to present you daring and pioneering projects.

At the dawn of new technologies, artificial intelligence is combining with artistic creation to propose innovative projects dedicated to raise awareness and protection of Nature.

At the beginning of this year, the marine environment takes a place of honor. Sources of all life, the sea and the oceans are a lung of oxygen for the planet and we must invent new techniques to stop their destruction, and furthermore to encourage their renewal.

The regeneration of the seabed and in particular of the coral reefs, true ecosystems of the depths, represents a major challenge for all defenders of the Planet and the Big Blue.

Art, a vector of awareness, becomes an actor of hope thanks to artificial intelligence.

Reconciling Nature with innovative technologies is a promising bet for the future.

The emotion, which emanates from these new art forms, captivates us as much by their beauty, as by the depth of their intentions.

The message is touching and traces the way to a new era where AI and ecology will advance hand in hand for the good of all and the preservation of our beautiful blue planet.

A dream within our reach to move forward together in the right direction.

Good resonance to all.

Nelda & Claude-Jean Lapostat

## TABLE OF CONTENTS

January 2023

- 4-5 Mare Nostrum
- 6-11 Researchers - Specialists - Experts
- 12-15 The Artists
- 16-17 Connected Therapy for Marine Fauna and Flora
- 18-19 NEFFIE - Meta-Picture & Metaverse
- 20-21 The Metaverse in Art
- 22-23 Moya, Artist, precursor of the Metaverse

**FIND THE MAGAZINE**  
**Articles, Contributors,**  
**Subscription**  
<https://erenouvellemag.com/>



06410 Biot - Sophia-Antipolis  
+33(0)4 93 655 500 - +33(0)7 86 56 02 13  
[erenouvellebioresonance@gmail.com](mailto:erenouvellebioresonance@gmail.com)

# Mare Nostrum

## A link between Science, Art and Technology

**Art and science have always been linked.** If science trains us to rigor, art is innovative. It is the imagination that is the precursor of all innovation.

The role of the artists is fundamental in innovation, especially in times of creative synthesis when society makes its own the advances in knowledge to transform them into new products and services.

Their imagination, creative ability and sensitivity are decisive assets. If history mainly retains their artistic achievements, in the past, artists were also very active innovators.

Today, we live in a much partitioned and increasingly digital world. And technology (including AI technology) has become our daily collaborator.

If it shares the science advances in the form of patents of industrial products and processes, in art, it completely upsets the creative process. Artists are often ahead of innovations: *“Each technology originates in the imagination and requires a description of what it can accomplish [...]. Each patent tells a story. Make this device, or go through this process, and some things will be possible – things never seen before.”* The first part of the **Mare Nostrum** project proposed since 2021 by the Art-Tech association took place in Biot on December 12, 2022.

The interventions and art works and objects exhibitions related to the issue of

plastic in the sea, have proven the strength and mutual enrichment of the links between Art, Science and Technology.

After a first reflection in 2021 and 2022 around the challenges of ecology and the future of our planet, the initiative of **Mare Nostrum** has federated around a clearly identified project, researchers, scientists, artists and High-Tech companies, leaders in new AI technologies.

Indeed, everyone can then contribute to the progress of a structured, large-scale project with chances of success.



**Mare Nostrum** is indeed a project, a commitment and a shared approach. The initiative aims to raise awareness and inform the general public on the challenges of marine pollution and the risks to Mediterranean biodiversity with the participation of companies involved in this field.

*Develop a complete mind;  
Study the science of art;  
Study the art of science.  
Learn to see.*

*Realize that everything is connected  
to everything else.*

*Léonard de Vinci*

**The future exists first in the imagination, then in the will, then in reality**

### Origin of the project

**Initiated by Diana LANDI, a reflection was structured in 2021 and 2022 around the challenges of ecology and the future of our planet.** Right away, Diana, living on the Côte d'Azur, has chosen the Mediterranean<sup>1</sup> to add her stone to the ecological battle engaged for several years by various but too dispersed and often unrelated NGO. It quickly became clear to her that “united we stand, divided we fall”.

Within this scope, **Diana, Art Tech<sup>2</sup> president,** organizes a triple event in connection with the “World Days of the Sea and Ocean”:

In **December 2022**, a half-day of ecological awareness and information on the **“Mare Nostrum”<sup>1</sup>** project.

In **February 2023**, an enhancement of projects and research that integrate Artificial Intelligence and Art with Ecology, on the occasion of the **2023 WAICF**.

In **June 2023**, an artistic and scientific event with conferences, workshops and exhibitions, in connection with the “International Ocean’s Day”.

*Diana Landi*

<sup>1</sup>Mare Nostrum is the name given to the Mediterranean by Romans

<sup>2</sup>Art\_Tech is a non-profit association, [www.diana-art.net](http://www.diana-art.net)

# Round Table

- **Diana VICINELLI LANDI**  
AI and Culture expert, EuroPIA Institute, mosaic artist, PhD in technological innovation.
- **Alberto BAUDENA**  
Researcher, Doctor in physical oceanography, and working at the Sea Institute (IMEV) of Villefranche-sur-Mer.
- **Giovanni BALDASSARI** President of EuroPIA Italy  
Specialist in circular economy applied to the Fishing industry socio-ecological system: from waste to work of art (MarGinet).
- **Tommaso OCCHIPINTI**  
Doctor in Telecommunications-CEO of Oenineering, a company that develops underwater cameras descending to a depth of 1000 m and equipped with standalone and intelligent video.
- **Thierry DESCHAMPS de PAILLETTE**  
Doctor in underwater telemetry systems, and CEO of HAVGUARD AS, Norway, Lofoten Islands.



## A link between Art, Science & Technology

The first part of the **Mare Nostrum** project, proposed since 2021 by the **Art-Tech** association, took place in Biot on December 12, 2022.

The interventions and exhibitions of art works and objects related to the issue of plastic in the sea has proven the strength and mutual enrichment of the links between Art, Science and Technology.

I was able to bring together specialized scientists who shared with us their work and research committed to our Mediterranean Sea, circular economy economists, entrepreneurs at the

forefront of underwater technologies for environmental monitoring and artists committed to the preservation of the marine ecosystem.

**As a reminder, the Mediterranean holds the sad record of one of the most polluted seas in the world. Primarily, plastic threatens biodiversity. Many are unaware that the possibilities for recycling plastic are endless thanks to AI technology.**

Finally, an exhibition of works of art made of recycled marine litter, including T-shirts and sculptures, could also be presented at this round table.

## The Artists

### Jérémy GOBÉ

Artist DR GL of CORAL ARTEFACT who works on the reconstruction of coral areas with a lace imitating the reproduction base of corals.

### Sofia CRESPO

Polymorphous artist has developed "Aqua (AI) forming" where, with the help of artificial intelligence, she allows to imagine and show in a living way, what marine diversity will be in a few years.

**Camilla ALBERTI**, who won the competition organized in Venice, with a very beautiful head, making the link between thought and this new world of plastic pollution, trying in her work, to imagine the world differently.

# Alberto Baudena

## Plastic Pollution is all over the world

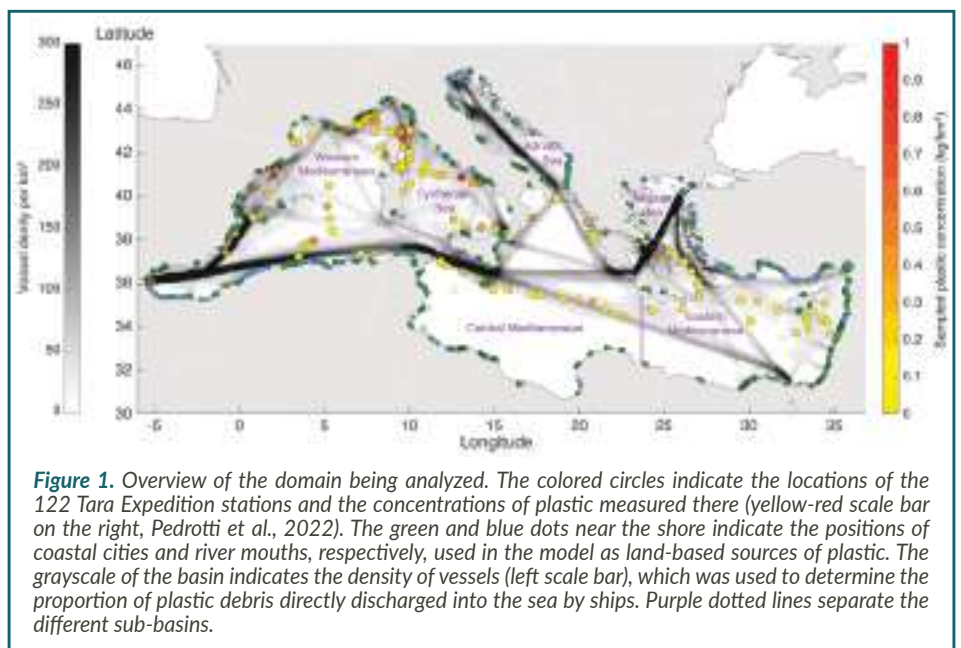
**Dr. Alberto Baudena is a researcher at the Oceanography Laboratory of Villefranche-sur-Mer which is attached to the Sorbonne University of Paris. He studies ocean currents and how they carry elements such as plastics or plankton.**

**Plastic pollution is now everywhere in the world**, causing economic, social, ecological, and human health problems. Huge quantities of plastic, spilling into the environment, end up in the sea: Estimates range from **18 to 22 million tons of plastic in 2016** alone. Some of these plastics are brought by ocean currents into one out of five accumulation zones in the world, the most famous being the “plastic continent” located in the North Ocean.

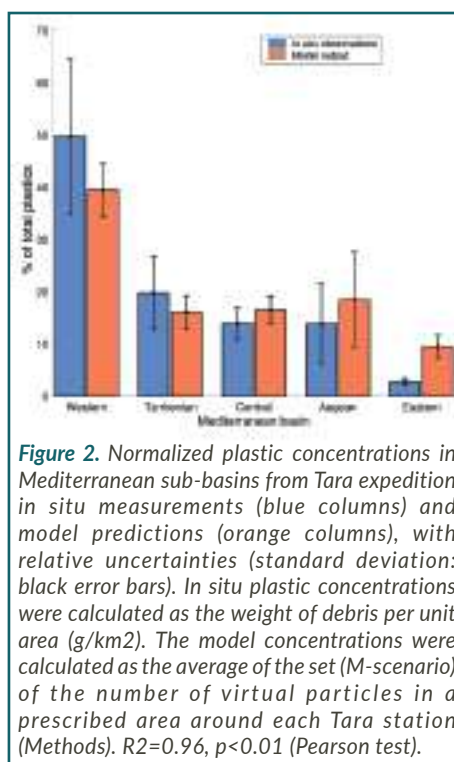
**The Mediterranean Sea is one of the most polluted seas in the world: with 260,000 pieces per square kilometer**, the concentration of plastic is similar to that found in the plastic continent. However, the Mediterranean Sea does not have areas of plastic accumulation as in the Pacific: this is due to currents that continuously change direction and prevent debris from accumulating.

The study of plastic pollution in the Mediterranean is therefore complicated, which also compromises mitigation.

**Dr. Baudena's team**, which is composed of four international teams (Sorbonne University - CNRS (France), Massachusetts Institute of Technology (USA), University of Bordeaux (France), and the French Research Institute for Exploitation of the Sea (France), has decided to adopt a different approach: instead of looking for places where plastic accumulates, they have looked for areas where large amounts of plastic get through before dispersing. To do this, they developed a model that simulates the entry of plastic into the Mediterranean and its transport.



**Figure 1.** Overview of the domain being analyzed. The colored circles indicate the locations of the 122 Tara Expedition stations and the concentrations of plastic measured there (yellow-red scale bar on the right, Pedrotti et al., 2022). The green and blue dots near the shore indicate the positions of coastal cities and river mouths, respectively, used in the model as land-based sources of plastic. The grayscale of the basin indicates the density of vessels (left scale bar), which was used to determine the proportion of plastic debris directly discharged into the sea by ships. Purple dotted lines separate the different sub-basins.



**Figure 2.** Normalized plastic concentrations in Mediterranean sub-basins from Tara expedition in situ measurements (blue columns) and model predictions (orange columns), with relative uncertainties (standard deviation: black error bars). In situ plastic concentrations were calculated as the weight of debris per unit area ( $g/km^2$ ). The model concentrations were calculated as the average of the set (M-scenario) of the number of virtual particles in a prescribed area around each Tara station (Methods).  $R^2=0.96$ ,  $p<0.01$  (Pearson test).

**With the help of artificial intelligence, they were able to see that the model's simulations matched with observations of plastic at sea.** They then determined where large amounts of plastic got through. About sixty of these “plastic crossroads” representing only 1% of the surface of the Mediterranean, see 20% of the plastic circulating there, which represents a huge amount.

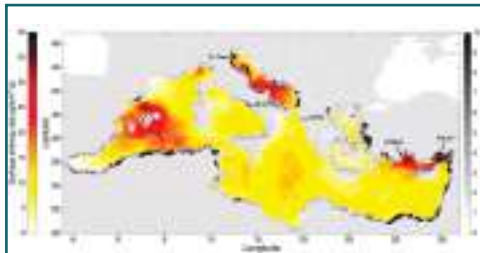
A particularly interesting point is located in the Balearic Sea. Far from the populated coast, far from any river mouth that can discharge waste, the north of the island of Mallorca (Spain) nevertheless has a strong concentration of plastic. Simulations show that it comes from Valencia, Barcelona and Algiers. Springs located several hundred kilometers away.

This new data could make it possible to better monitor this pollution. In particular, by placing fixed stations in these “plastic crossroads” to better quantify it.

**Dr. Baudena and his teammates also studied plastics that wash up on the coasts. On the Côte d’Azur, on every kilometer of coastline, two kilograms of plastic run aground every day.**

The situation is no better when it comes to plastic lying on the bottom. Off our coasts, models indicate areas of accumulation of plastic debris on the seabed, with concentrations between the highest in the entire Mediterranean Sea.

Dr. Baudena’s team did not detect a “plastic crossroads” off our coast. But that doesn’t mean there is none. Firstly,



**Figure 5.** Average net grounding and surface sinking rates in the Mediterranean Sea between 2014 and 2016. Coastal grey dots indicate the net amount of plastic debris (kg) washed up daily per kilometer of coastline (grey scale on the right). Surface pouring rates correspond to the amounts of plastic debris (g) that sink into one square kilometer of surface each day due to biofouling (color scale on the left).

because simulation has its limits and because it is possible that the amount of plastic brought by rivers in France and Spain has been underestimated. They still identified a route with an important concentration between the Gulf of Lion and Cap Corse. This could be due to the Liguro-Provençal current that circulates along these coasts and could carry a fair amount of plastic.

*Reference: The streaming of plastic in the Mediterranean Sea (2022). Alberto Baudena, Enrico Ser-Giacomi, Isabel Jalón-Rojas, François Galgani, Maria Luiza Pedrotti. Nature Communications. DOI 10.1038/s41467-022-30572-5*

Alberto Baudena

## Giovanni Baldassari

**Specialist in the circular economy applied to a fishing industry socio-ecological system:**

### “From Waste to Work of Art”

Originally from Venice, he is inspired by great Italian artists such as **Filippo Brunelleschi** or **Leonardo da Vinci** to **link Science and Art** (as did those great scientific humanists before us). **Baldassari** collaborates with **MarGinet Technology & Art-Tech** to **find a sustainable solution to the problem of ghost nets**. Indeed, these fishing boats represent 10% of the plastic pollution of the oceans and 46% of the debris of the Pacific “plastic continent” (VORTEX) (reference, Nature Journal, 2018).

In this context, together with **Diana Vicinelli Landi** and in collaboration with the **CNR** (National Research Centre) in Venice, they launched the project **“From Waste to Work of Art”: an alliance between Art, Technology and Ecology**.

**MarGinet Technology** tries to solve the problem of ghost nets, by locating them, recover them at great depths, and reuse them once transformed. Satellite images enable to identify the deposits, then to

reassemble them, before transforming them into biofuel, recycled fabric, carpets, phone shells, luggage, various objects etc., and work of art.

**More than 20 artists participated in this project.** Beforehand, these artists submitted their concept to a jury who chose them after evaluating their projects on: the aesthetics of the work, the strength of the ecological message and the size of the work.

The artist, **Camilla Alberti**, received the necessary material and budget to realize the 1st work of the project. This work was exhibited at an evening in Venice with representatives from business, academia, research, and art, world. Eclectic conversations that took place during the evening had multiple practical implications with: artists who found new clients, companies that have decided to invest more in their ESG initiatives, many business exchanges, and much more.



**Camilla ALBERTI's work who won the competition organized in Venice: “From Waste to Work of Art”.**

# Autonomous and intelligent underwater video surveillance: **of the GUARD-1 system**

The **GUARD-1 project** is an example of excellent collaboration between the worlds of **scientific research and business**. Through concrete technology transfer work, various research institutions have collaborated with innovative companies to create an integrated system dedicated to monitoring underwater life.



**GUARD-1** is a **fully autonomous underwater video camera** with automatic or programmable analysis capabilities and where **artificial intelligence techniques** can also be implemented. **GUARD-1's main objective is to analyze underwater life, biodiversity and conduct scientific research on the health of the sea.**

The **GUARD-1 system** was developed because the video-based methodologies are not invasive for the natural environment. This type of methodology is also economically efficient since **it does not require the use of bulky and expensive equipment**. Finally, the

***Simone Marini**, National Research Council of Italy (CNR),  
Institute of Marine Science, [simone.marini@sp.ismar.cntr.it](mailto:simone.marini@sp.ismar.cntr.it)*

***Tommaso Occhipinti, Sebastiano Brusaferrò**  
Oengineering s.r.l.  
[tommaso.occhipinti@oengineering.eu](mailto:tommaso.occhipinti@oengineering.eu)*

***Ennio Ottaviani, Enrico Prampolini**  
On AIR s.r.l.  
[ennio.ottaviani@onairweb.com](mailto:ennio.ottaviani@onairweb.com)*

**GUARD-1** technology fully follows the Marine Strategy Framework Directive (MSFD-2008/56/EC).

The development of the **GUARD-1** system has led to the creation of

important scientific publications in order to justify the creation of a commercial product and to **make the potential of this system available to the world**. Oengineering SRL



- **Autonomy**
- **Embodied Intelligence**
- **Implementation of the sensors web and of the Internet of objects**
- **Application flexibility**
- **Fixed and mobile platforms**
- **Extended deployments in time and space**



therefore designed and created the complete system, while OnAir prepared part of the software useful for its proper functioning. These two companies have been constantly monitored from a scientific point of view by CNR-ISMAR and the system has been positioned in various application contexts to demonstrate its functionality, for example in Lerici (Italy) and soon, also, in the bay of Portofino (Italy).

*Tommaso Occhipinti (PhD)  
 Founder and Managing Director |  
 Oengineering SRL*

# Thierry Deschamps de Paillette

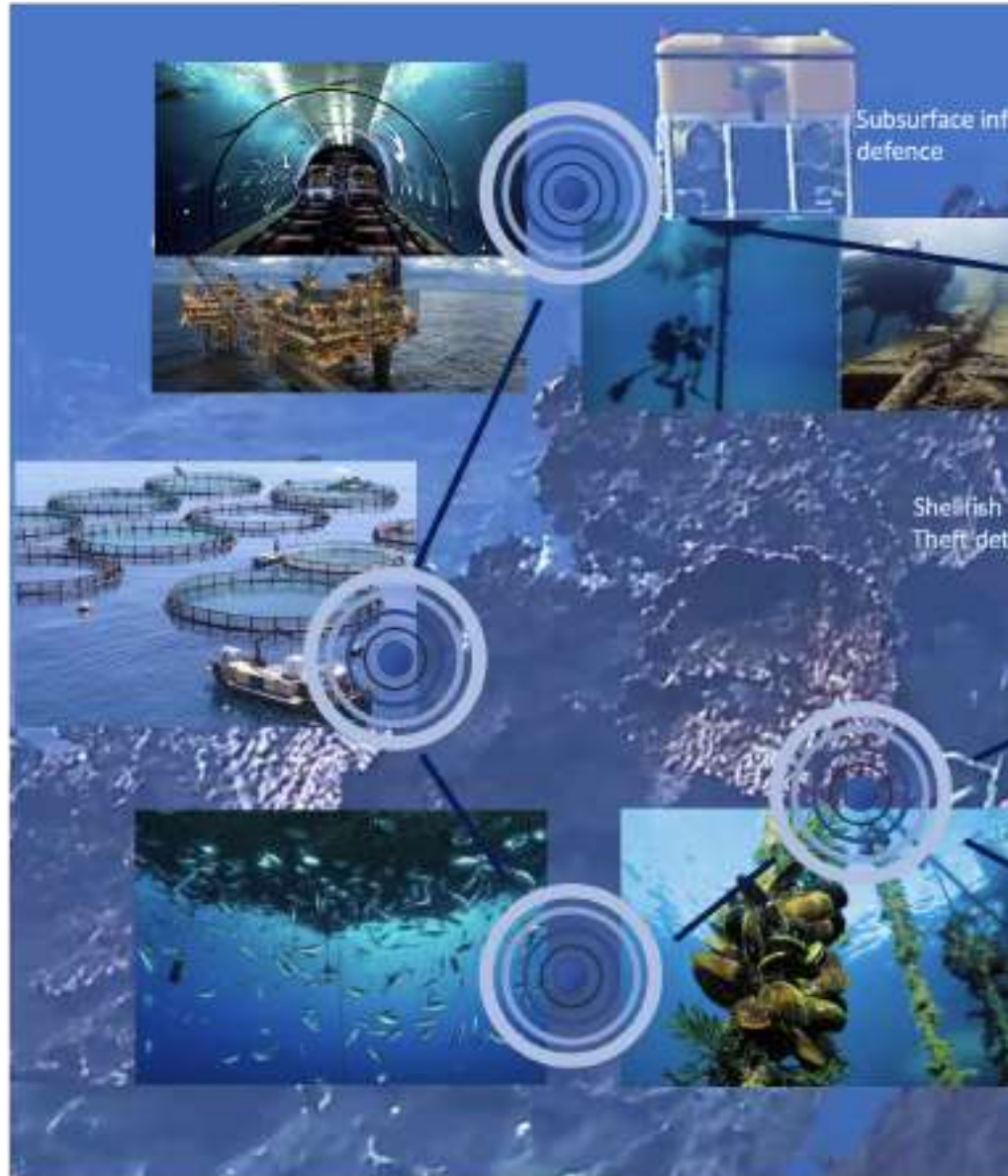
## The best Underwater Technologies for monitoring marine pollution and preserving biodiversity

### The observatory proposed by Havguard in the Lofoten Islands in Norway

**HAVGUARD AS** develops and presents an **industrial mixed reality metaverse** dedicated to the monitoring and the maintenance of underwater sites or infrastructures that includes **AI**, robotics and information systems **for surveillance and environmental control**.

Monitoring the underwater environment requires the deployment of specific sensors and infrastructure, the cost and impact of which on fauna and flora must be reduced. The target application targets geographical areas of less than 1km<sup>2</sup> in which wireless transmissions of video streams and measurements are collected by networks of sensors submerged at all depths.

The measurements are transmitted to the Cloud where an artificial intelligence analyzes the data in real time and makes it possible to rebuild the underwater environment to ensure its monitoring and the follow-up of parameters useful for the site operations.



- COMMUNICATION AND DETECTION
- DETECTION, LOCATION AND IDENTIFICATION OF THREATS
- INSPECTION AND MAINTENANCE OF PIPES AND INFRASTRUCTURES
- POLLUTION MANAGEMENT



Site protection

Infrastructure monitoring &

Underwater Energy Plants monitoring



Farming telemetry, detection and alerting

Environmental and pollution Monitoring

Growth Monitoring

The three-dimensional vision of the environment then allows operators equipped with 3D glasses to pilot underwater robots to inspect facilities and carry out maintenance operations.

**HAVGUARD AS** establishes partnerships with major international industrial, academic and economic actors to integrate innovative technological solutions to the problems of monitoring

and maintenance of underwater sites and infrastructures.

DL

# MARE NOSTRUM

## Immersive Experience

The **MARE NOSTRUM immersive experience project** proposes to immerse the viewer in the heart of the problem of underwater plastic pollution.

The video projections will be made simultaneously on 3 screens that represent the 3 interconnected themes of the project: **Science, Art and Artificial Intelligence Technologies.**

### The Artists

#### Jérémy GOBÉ

Artist DR GL of CORAL ARTEFACT who works on the reconstruction of coral areas with a lace imitating the reproduction base of corals.

#### Sofia CRESPO

Polymorphous artist has developed "Aqua (AI) forming" where, with the help of artificial intelligence, she allows to imagine and show in a living way, what marine diversity will be in a few years.

Camilla ALBERTI, who won the competition organized in Venice, with a very beautiful head, making the link between thought and this new world of plastic pollution, trying in her work, to imagine the world differently.

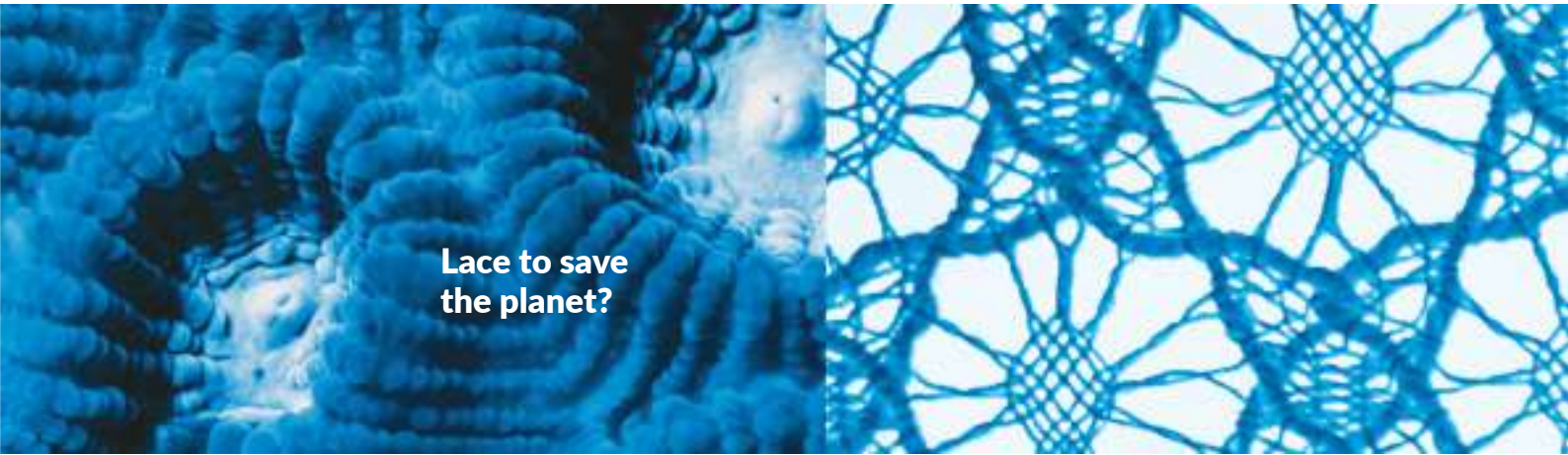




# Jérémy Gobé

## An “Art in Life”

Combining art-science-industry-education to save the coral reefs



Lace to save the planet?

**Jérémy Gobé** is a visual artist who uses **AI and digital technologies in his creations**, particular for the preservation of corals.

Since then, **Jérémy Gobé** **unceasingly creates and develops in order to protect**

A graduate of the Beaux-Arts in Nancy and the Arts Décoratifs in Paris, **Jérémy Gobé’s** plastic work reflects the vision of an art **“in life”**. Inspired by nature to respond to contemporary issues, his digital works reconnect with the living by combining old know-how and new technologies to project, transform and imagine the future.



During his research for a creative work, he realized that one of the French lace patterns, more than 400 years old, looked incredibly similar to the coral skeleton he already uses for his plastic creations. Could this lace help save corals? **Jérémy Gobé** then imagines the **“Corail Artefact”** project, a link between ancient textile know-how, new technologies and the protection of coral reefs through 3D scanning and the realization of complex structures.

**and raise awareness of the richness of biodiversity.** Using lace, organic concrete and 3D prints, he shows that it is possible, thanks to art and new technologies, to find eco-responsible solutions for the regeneration of coral reefs.



DL

# Sofia Crespo

## IA and Digital Creation

**Sofia Crespo** is an artist specializing in **AI creation** who works with new technologies inspired by biology.

**Sofia Crespo** is an artist who works with technologies inspired by biology.

One of her main interests is how organic life uses artificial mechanisms to simulate itself and evolve, implying the idea that technologies are bias products of the organic life that created them and not a completely separate object.

**Crespo** examines the similarities between AI's image-forming techniques and how humans creatively express themselves and cognitively recognize their world.

Her work challenges the potential of AI in artistic practice and its ability to remodel our understanding of creativity. In parallel, she is also very concerned with the dynamic evolution of the role of artists working with automatic learning techniques.

She is also the co-founder of the "**Entangled Others**" studio.

### AquA(I)formings

Using narrative-poetic thinking and relying on artificial intelligence (AI) technology, **AquA(I) formings** brings up the opportunity for inter-species empathetic development of relationships with more than human entities.

It explores large-scale changes in the marine environment caused by human presence and attempts to imagine how the new conditions (rising sea level and water temperature, new chemical composition...) are reflected on its inhabitants. Seas and oceans record these environmental changes in biological or geological time as memories, either

within individual organisms, or as changes identified in ecosystem structures. In this project, the authors follow the silky byssus threads of the noble pen shell (**Pinna Nobilis**) and adopt it as a visual synonym for both the Other and the individual marine inhabitant, which aroused and still arouses the curiosity of scientific and artistic researchers on marine habitats, seaside dwellers and ancient merchants.



The use of AI technologies makes it possible to conceive ideas on the future, for example, of the noble pen shell and the vast underwater meadows of the *Posidonia oceanica* herbarium in the northern Adriatic Sea.



Today, however, the noble **pen shell** has succumbed to a disease caused by environmental changes.



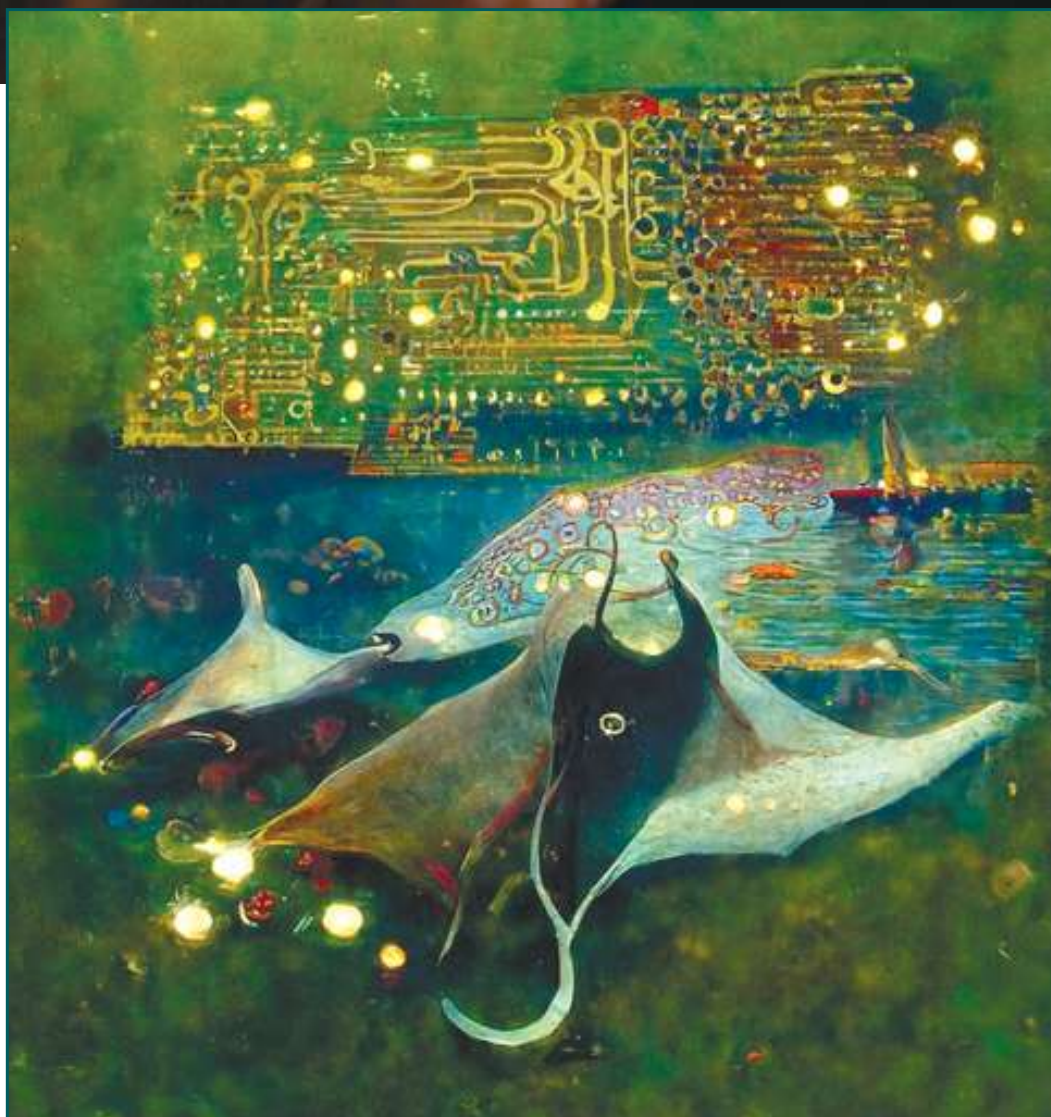
By including the history of the noble pen shell, the authors also initiated the research project on the use and development of new biological materials that do not invasively interfere with the habitats of selected organizations or their general existence.

**The great Mediterranean mother-of-pearl is the largest bivalve shell endemic to the Mare Nostrum. Once exploited for the mother-of-pearl of its shell and for the byssus that was used to weave scarves, gloves or hats, it could even be consumed. Long attacked by sewage discharges, boat anchors, trawling and developments of coastlines, the populations of Pinna Nobilis have drastically declined.**

**Threatened with extinction, it is now protected. Accordingly, populations are reconstituting, especially in protected areas.**



© Sofia Crespo "Beneath the Neural Waves"



## Beneath the Neural Waves

Beneath the Neural Waves explores biodiversity through an attempt to create an aquatic ecosystem (digitally) by trying to address the very abstract concept of relationship. These dioramas of artificial life, as well as the various sculptural fragments, imagery and text, tend towards the complex entanglement of natural life, both with itself and with others. Explore a neural generated coral reef fragment and some of the specimens that reside there.

DL



# Connected Therapy at the rescue of **Marine Fauna** and **Flora**

**Albert Einstein** said: **“Everything is energy and vibration”**.

Since then, thanks to advances in **Quantum Physics** in recent years, we know that **electromagnetic waves are intrinsically linked to our biology and act as a language within the Universe. Bioresonance and Biofeedback** allow us to consider our health through a vibrational approach. **These techniques, also known as quantum therapies, are a very valuable aid to apprehend, in particular, the fauna and flora in the seas and oceans.** This objective is made possible by the **dialogue** (in this case, the exchange of electromagnetic waves) **between the Bioresonance apparatus, the L.I.F.E.-System, and the subject. Connected therapies** have their entire place in the whole world marine ecosystems because they **reharmonize the living world.** These Bioresonance technologies are revolutionary since they **can compensate the impossibility for fauna or flora to put words on its evils.**

## **Marine Ecosystems & Energy Frequencies**

**Animal communication** is generally essentially **vibratory and intuitive. Marine fauna and flora are also very receptive to energy frequencies.** Marine animals are instinctively connected to their surroundings. They detect almost instantaneously, fear, aggressiveness or goodwill. Their vibrational receptions exist on a more subtle plane than that of the human being who, over time, has lost this primitive capacity of relationship with his environment. This ability to feel explains the **excellent results of Bioresonance with fauna and flora;** results not only spectacular but often faster than on humans.

## **Application of Bioresonance & Biofeedback to Marine Fauna and Flora**

**With the L.I.F.E.-System,** it is possible to: **make a check-up, verify and rebalance the energy health and general well-being of all marine ecosystems** (algae, marine plants, all plant species and animals that live in the seas and oceans). It is possible to reharmonize the living world. It is also a great help to preventively detect dissonances.

The L.I.F.E.-System has a specific profile that lists almost all the most common diseases and their frequencies by categories of marine animals, thus improving the possible therapeutic reactivity to an identified pathogen. New frequencies can also be added depending on diseases or new viruses. The L.I.F.E.-System also includes **the vibrational analysis of all the emotions of the living world.** With the marine animal that cannot verbalize its emotions, this possibility is essential. Indeed, it makes it possible to understand the specific behaviors that it could have in order to improve exchanges and communication.

The L.I.F.E.-System is **an essential tool and an ally for any professional from the world of marine fauna and flora, concerned with its protection and preservation.** It makes it possible to **understand and act on imbalances** with astonishing precision. Its versatility and ability to work remotely are also particularly appreciated.

It should be noted, and this is very important, that **energy rebalancing is completely painless and non-invasive.**

## **Principles of Quantum Therapy: Bioresonance & Biofeedback**

Quantum therapies of Bioresonance and Biofeedback consist of **an energetic rebalancing of the human body** based on electromagnetic and scalar waves of very low frequencies. **These waves govern the biological balance of any living being** and offer the possibility to work remotely.

Each individual also reacts to the waves that are emotions, great disruptors of our physical and physiological integrity. **The human body is a transmitter/receiver, and each of its organs or tissues emits a specific frequency of functioning of its own.** This frequency allows the organ to communicate with the rest of the body for a coordination of vital functions: **it is a kind of universal language of the living.** With these vibration analysis techniques, it is considered that **the disease appears when there is a disturbance of specific frequencies in the body, possible consequences of physical or emotional trauma.**

The energy disruption leads to a disturbed communication of the organ which will eventually trigger a reaction of progressive chain dysfunctions, **hence the need to restore the right frequency, by reinforming the body.**

These rebalance help restore serenity while repairing the physical body and the emotions.

## **What is the L.I.F.E.-System?**

**The L.I.F.E.-System** is a quantum scanner for vibrational analyses of the entire human body, Bioresonance. It **analyzes the frequencies of the organism on more than 8000 points or items.**

After analysis, the practitioner reinform, by Biofeedback, perturbed organs or tissues with the correct corresponding vibrations. The human body can then self-regulate and regain its homeostasis.

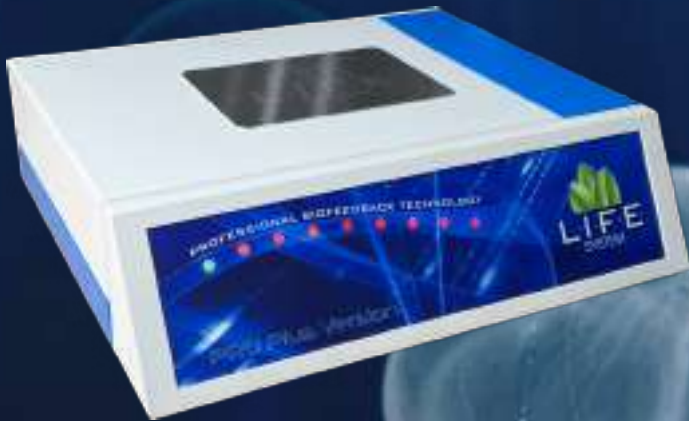
*Olivier Barbarin*



# L.I.F.E

LIVING INFORMATION FORM ENERGY

**BIORESONANCE & BIOFEEDBACK  
THE ALLIES OF FAUNA AND FLORA  
IN THE SEAS AND OCEANS**



**Analysis & Energetic  
Rebalancing**

**Reharmonize the living world**



Biot-Sophia Antipolis - France  
+33(0)6 07 05 92 17  
quantaform.com



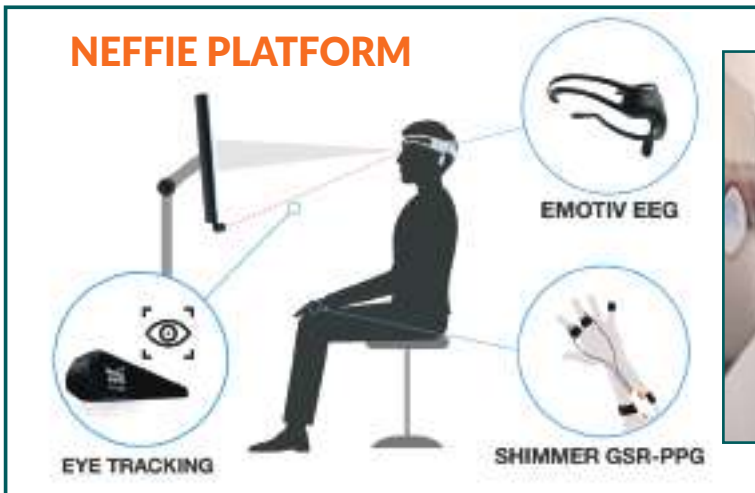
NEFFIE, COFFIE, NEFTIE

Artificial INTELLIGENCE

# NEFFIE

## Art, Future & Artificial Intelligence

**NEFFIE**, which stands for “**Neuro-aesthetic Photography**”, is an interdisciplinary project aimed at **exploring the possibilities offered by the application of artificial intelligence to the art world.**



Every day, an extraordinary reality, full of stories and unexpected details, is unfolding before our eyes. Our distracted gaze is unable to grasp these ephemeral and temporary moments, which are, instead, captured in a specific photograph. **This photograph immortalizes** those precise moments when the ordinary becomes extraordinary and vice versa, **creating a unique story.**

Everyone, thanks to their personal gaze, can become the main character of this wonderful story. Indeed, **each individual perception generates a unique story**, which can be shared and added to others **on a virtual and innovative platform.**

**The project is based on a particular visual language capable of stimulating our cognitive and emotional system.** All neurophysiological responses are controlled by **biosensors, processed by an AI algorithm and interconnected in a cognitive-emotional Metaverse.**

Composed of **three interconnected parts: Neffie, Coffie and Neftie**, it was presented for the first time in Milan at the MIA Fair 2021.

**The first part, Neffie**, which is also the title of the whole project, is responsible for activating the entire neuro-aesthetic mechanism. **The starting point is real life itself**, captured and photographed by the observer – defined as “first-level author” – with a mobile camera or any other device.

Each photograph is a fleeting image of a totally unexpected, fascinating and unpredictable story, which, however, is real. **This meta-image is a** multiform, multifaceted and articulated **way of looking at the world**, which stimulates the gaze and mind of the observer, activating its complex interpretative process.

**The second part** is called **Coffie**, the acronym for “**Cognitive Photography**”. It is essentially a totally unique and original photograph, produced by an observer and his cognitive and emotional response to one of the **Neffie’s** metaphors mentioned above.

The process involves a complex technological platform where the “second-level author” will experience his neuro-aesthetic reaction.

In practice, the observer enters a **photo booth** and sits in front of a screen. A technician places biosensors on him and an eye-tracking device to monitor his emotional and cognitive responses to one of **Neffie’s** images on the screen.

During the experiment, an AI algorithm processes the data, and after a few minutes, the result of this processing is available in the form of another photograph – **Coffie’s** meta-picture – which highlights the details the observer has focused on, while the rest of the image is blurred.

**This image is the concrete and tangible result of his neuro-aesthetic experience.**

The **Photo Booth** had always been a way to take an impersonal, standardized photo of the user; **Vaccari transformed it into an artistic tool that emancipates individuals**, giving each of them the opportunity to express themselves freely.

If **NEFFIE** retains the original intention of Vaccari, it goes further thanks to the new possibilities offered by new technologies.



Virtual reality rooms



The observation of an image is an active process that involves unconscious mechanisms based on our levels of attention, our emotions and perceptions.

**Cognitive photography is the visual representation of what the observer sees and feels in front of an image.**

Each individual reaction is different because everyone has their own sensitivity, history and visual identity.

Through science and technology, taking a photo and observing it becomes actions that can be shared.

The last part of the visual code is therefore devoted to the social dimension of NEFFIE. All meta-pictures are shared on the virtual wall of the Lieu.City platform, which made possible the Real-Time Virtual Exhibition n. 1 at the MIA Milan Image Art Fair 2021.

This original platform promotes digital interactions between gallery owners, art collectors, art lovers and interested people.

It allows **Netfie** to create an environment in which people are able to share their personal aesthetic experiences and talk about them, thus creating links and connections between their cognitive identities.

Indeed, the suffix “-tie” of the **Netfie world means “link”**. In practice, each unique meta-picture, belonging to the individual who generated it, is linked to an NFT as a cryptographic record of the ownership which is then encoded into a Blockchain. **Thanks to NFT and Blockchain, Netfie and Lieu.City** are able to materialize all these invisible and precious links that are created when different individuals look at the same work of art with a different look.



DL

# Metaverse in Art: Web1 Web2 and Web3

The metaverse is a structured and open virtual world, parallel to the physical world, combining virtual reality and augmented reality. This term is regularly used to describe a future version of the Internet. The origin of the metaverse was made possible by technologies and interfaces that allow humans to interact with others in an immersive and intuitive way in a dynamic environment in real time.



After 40 years of television, from 1960 to 1999, two extraordinary phenomena have revolutionized our lives from the point of view of the media: the Internet and Smartphones.

We spend more and more time on our screens (\*1). Since the arrival of laptops, smartphones and tablets, we have started to live in augmented reality. This trend, accelerated by the health crisis, has made it necessary or has prompted individuals to spend more time on the Internet.

We are learning to work remotely, to talk to each other via apps, to participate in cultural events online, if we couldn't do it face-to-face. And this phenomenon is accelerating: we are solicited by more applications and technical possibilities. In the coming years, we will begin to live new "immersive" experiences: those of augmented and virtual reality. These 3D shared virtual spaces open the field of possibilities to a new major digital revolution.

These realities already have a very important impact on business companies today and will soon become part of our culture and lifestyle by bringing great innovations.

"Obviously, this means that **the metaverse has huge potential** to change the way communication works between people.

**This will make the game more realistic and immersive, and it will allow consumers to test the products before buying them, in a virtual environment.**

It will allow you to travel the world without ever having to leave your room – much like what you can already do with Google Maps and Street View, but imagine it being more immersive and lively, and filled with other people exploring the world next to you."

Devices that support AR and VR (\*2) will become almost as widespread as smartphones that already incorporate many metaverse features: we are migrating towards WEB3.

## And in art?

**The metaverse abolishes the last boundaries standing between the physical and digital worlds.** The metaverse opens up a world of **infinite possibilities** which has no limits but human imagination and technological advances.

**The metaverse is a virtual world parallel to the physical world,** combining virtual reality and augmented reality. Since it requires specific equipment, including a VR headset to access it, for the moment its use is not widespread.

In any case, as mentioned earlier, the metaverse brings changes in almost all areas, training, education, sport, health, etc., **all are concerned.**

Given its adoption in today's world, it is likely to dominate the real world in the near future.

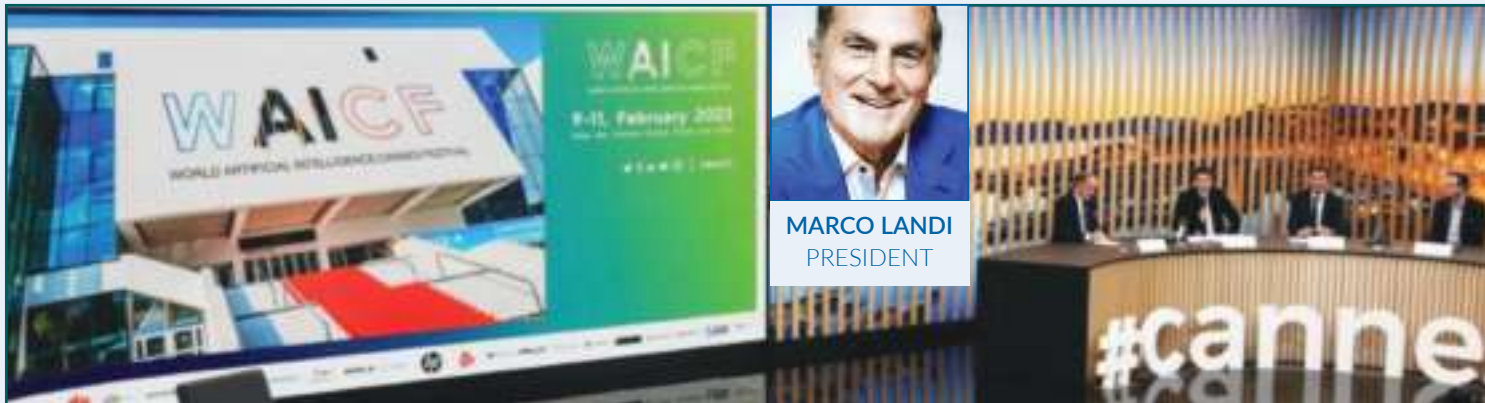
*Diana Landi is AI & Art expert from the Europa Institute*



*Diana Vicinelli Landi's Avatar will guide us through the metaverse*

\*1 A US study has shown that since the beginning of the pandemic, screen time has more than doubled among 10-14 year olds, from 3.8 hours/day to 8 hours daily. JAMA Pediatric. 2022 Jan.

\*2 Ref: "AR" and "VR" (Augmented reality & Virtual reality).



# The Human at the Heart of Artificial Intelligence

## **Our Mission: Promoting ethical Artificial Intelligence**

**Europa Institute at the heart of the WAICF festival  
from February 9 to 11, 2023  
Palais des Festivals – Cannes**

Throughout the year, the Europa Institute offers highly acclaimed Conferences:

- **The Metaverse at the service of tomorrow's health: what hopes and ethical vigilance?**
- **Who will benefit from the Metaverse?**
- **Artificial Intelligence and Power**
- **Senegal: AI at the service of economic and social development**

INSTITUT  
**EUROPIA**  
COMPRENDRE POUR AGIR

**Become a member...**





# Moya, Pioneering Artist of the Metaverse

Visual artist, performer and digital artist, the French artist **Patrick MOYA** works in tree view, **juggling between real works and virtual worlds, in an invasive and immersive approach** that takes as a pretext his name and his image. With the goal of becoming a **“creature that lives in his work”**. A goal achieved in 2007, through his **avatar**, when he moved into **Second Life**, where he rebuilt his artistic universe in the form of 3D pixels, becoming from then on one of the first **“artists of the metaverse”**.

As comfortable with a brush as with a computer, **Patrick Moya** begins in 1985 by writing his name in basic on a Thomson MO5 computer, before **digitizing his little “moya”** (originally a painted caricatured self-portrait mixed with Pinocchio’s attributes), to make images and then 3D films.

**By investing in 2007 the virtual world of Second Life (SL), he splits and lives, since, two lives:** every evening in front of his computer, **like a puppeteer of himself**, he revisits and remixes his real work, thanks to this metaverse which offers him the opportunity to make known to the whole world his universe of artist in a fun and educational way.

He thus discovered the ideal way to visually transcribe his work “in tree structure”, which goes in all directions, refuses to limit itself, touches all media, styles, techniques,... **to make it a global work of art.**

## Moya, metaverse artist

**As a pioneer of the metaverse, he now makes optimum use of all the incredible resources of this new world:** construction of an ideal museum, then, like an urban planner, a real city, with shops, old village, castle, chapel, hospital, airport, tramway, ...

The opportunities are numerous: to participate in countless **exhibitions, openings, conferences, interviews, meetings without limit** (and easy communication thanks to the automatic translator in all languages). But also, **realization of 3D models** to organize an exhibition, even at a distance

Not to mention the new possibilities offered by Linden Lab (the company behind Second Life) to transform into volume and animate characters originally drawn or painted.

Finally, for proof of Moya’s great availability and generosity, **the organization of guided tours, by car or virtual plane... by the artist himself.**

In short, **construction of an ideal world** in which the artist can finally, **through his avatar**, live inside his work while meeting his audience live and remotely.

But his virtual curiosity does not stop there: beyond **Second Life, he is in perpetual search for new universes**, from the very first now disappeared, such as the Chinese Hipihi, or Cloud Party, to the most recent ones like AltspaceVR (Microsoft), VRChat, Roblox, Spatial, Sansar and of course Horizon world from Meta... **where he has, each time,**

**tirelessly, recreated his Moya Land.**

**Pursuing his ultimate dream, that of living in his work, in every possible way...** waiting for the day when he could survive (at least his brain) for eternity in this ideal world.



between the artist and the curator, then conservation of this event that can be revisited endlessly; or **creating complex images featuring the avatar surrounded by 3D objects**, in a virtual Moya studio that also serves as a photo and video laboratory.

Because **Moya** has long had this dream of an artificial intelligence that would carry out its work in his absence and **even after his death.**

**“A virtual work of art that lives with or without its creator”, it is today Moya’s dream that comes true.**

## **Second Life exists more than ever**

**Yes, it does endure and continue to make people talk about it, this virtual world that even gained new followers during the last confinement. Moya took the opportunity to redouble his activities and to multiply all over the place. Here is a little panegyric.**

students from the Beaux Arts of Lyons and reproduced in 3D his room “Moya Collection” (painted in situ) of the Masena Museum, in which he organizes - in the absence of a real vernissage - a virtual vernissage, in the presence of the avatar of the real director.

In June, he participated in the Burning Man festival partly transposed into SL, on the imposed theme of the “multiverse”, as well as in the Dutch Design Week in Eindhoven (which takes place this year partly on SL), organizing a live tour of the

18), to the symposium “the virtual and the tangible” with museum curators ... Not to mention his participation, for several years, for the anniversary of **Second Life**: in June of each year, the “Linden” (employees of the Linden Lab company) prepare a field, make the landscaping and invite the best elements of SL, musicians, speakers, artists, business leaders, media gurus,



*Patrick Moya, digital work for the Monaco Science Centre. 2019, 110 x 250 cm. Entirely realized and photographed in the virtual studio of the metaverse “Moya Land”.*

Created in 2003 by Philip Rosedale, a Silicon Valley entrepreneur, this networked serious game, built by its inhabitants, remains today far ahead of all its competitors and, by far, the most sophisticated.

During the lockdown, it would have even gained 28% of followers (or 252,000 inhabitants worldwide). An exhaustive report by blogger Sylvain, in May 2020, shows that some young people have never heard of SL but others have become developers or have learned English thanks to it.

**As for Moya, the confinement was a grandiose opportunity to multiply:** in April 2020, he received the visit of

island and an evening with an installation on the theme of “monsters”.

On November 28, it is the **virtual opening** of his real exhibition “Moya Tele-artiste”, in a Théâtre de l’Artistique in Nice reproduced identically thanks to his collaboration with the director of the venues, Eric Léon, who became passionate about SL.

Let us also mention a participation in Laval Virtuel, to conferences for universities in screen sharing (Paris 8, Paris Eiffel), to the carnival of Mazatlan, to a retrospective of art in SL from 2006 to 2016, (with the Museo del metaverso), to the international museum Day (May

shopkeepers... The event lasts at least a week, with precise rules to respect, a free field, a theme...

In 2019, for the 16th anniversary, **Moya** built, on the theme of the “50s”, a villa “à la Tati”, in which we could revisit the life of the artist, born in 1955, since his birth.

**Nowadays, many universities come to visit his island** and, unique fact, the **Moya Land** has already officially signed several internship agreements with students (École supérieure d’art et de design du Mans TALM or École Supérieure d’Art de Lorraine in Épinal), and organizes at the end of each internship an evening with a DJ, without ever having physically met the students.

*By Florence Canarelli*

**QUANTUM RESONANCE POLE**

**BIOFEEDBACK  
&  
BIORESONANCE**

**INNOVATIVE SOLUTIONS  
FOR YOUR  
HEALTH & WELL-BEING**



**QuantaForm.com**  
ENERGY & TECHNOLOGY QUANTIC

La Bastide des Mimosas  
826 Chemin de la Chèvre d'Or  
06410 Biot - Sophia Antipolis

+33 (0)4 93 65 55 00

+33 (0)6 07 05 92 17

[www.quantaform.com](http://www.quantaform.com)

[claudjean@quantaform.com](mailto:claudjean@quantaform.com)

Magazine offered by

