

## BIOGRAPHY



WOLFGANG TRETTNAK, born in Graz, Austria, received a PhD in Chemistry from the University of Graz, worked in scientific research on sensors and biosensors for many years and published a number of scientific articles. In 2002 he shifted his focus from science onto art and converted into an independent artist. But since then he has been combining science and art in his artistic work.

His oeuvre, which comprises painting, object art and installations, has been shown in individual and group exhibitions in Europe and China. In addition, lectures of a popular scientific nature complement the shows. He is living and working in Styria south of Graz and temporarily in Galicia, Spain. He forms part of the international art and science association ARSCIENCIA.

## CONTACT & INFORMATION

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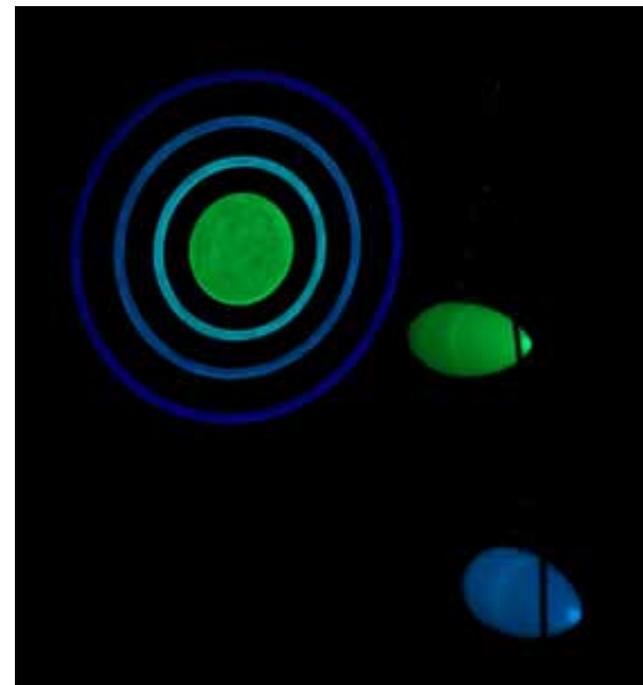


*Title photo:*  
"Photons - Hitting the target"  
Hanging mobile (detail)

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## ART AT THE BIENNIAL



**LUMEN LUMINIS**  
by  
**WOLFGANG TRETTNAK**

**XXXVI Biennial meeting of the  
Real Sociedad Española de Física**

**Santiago de Compostela  
17 - 21 July 2017**

[www.bienalrsef2017.com](http://www.bienalrsef2017.com)

## SCIENCE & ART



OCTOPUS

Acrylics and electronic components on canvas; 81 x 100 cm; 2009

## ECO-ART



SLIPPER ANIMALCULES (with M. Cimadevila)

Marine debris and mixed technique on canvas; 80 x 100 cm; 2014

## LUMEN LUMINIS



IN VITRO III (with P. O'Leary)

Approx. 50 (H) x 126,5 (L) x 78 (W) cm; 2009-2011

Since many years Wolfgang Trettnak has been linking science with art on subjects such as bionics, electronics, luminescence and environmental hazards. Respect for nature, recent developments in technical, medical and genetic engineering, eminent threats to marine life such as overfishing and the contamination of the sea, as well as his own scientific background are the sources of inspiration for his work.

This journey between two different worlds has led him from “bionic” visions of the human being and the domestic animals to *ELECTRONIC FISHES*, an exhibition, which is dealing with electric fishes, bioluminescent marine organisms and fish robots. Here discarded electric circuit boards, solar panels, light-emitting diodes and other electronic components have been integrated into the paintings.

*MARE PLASTICUM – PLASTIC FISHES* is an exhibition dealing with the pollution of the oceans by plastic materials and its environmental consequences: entanglement, plastic ingestion, mortality of species, toxicity ... Its objective is to make known these and other problems to the public and to sensitize it. It offers a vision that is both real and imaginary and is sounding the alarm “It is time to act!”

The art works (paintings/assemblages) are made of plastic litter, which was collected on Galician beaches by the authors Wolfgang Trettnak and Margarita Cimadevila. Scientific information, comics, posters, mobiles and videos complete the exhibition, which has been shown in renowned places such as the *Oceanographic Museum of Monaco* or the *CERN* and has obtained the 1st prize in Sustainability in Spain.

Inventiveness and love for wood combined with chemical background knowledge and artistic creativity have led in the past ten years to a slowly but steadily growing number of luminescent objects with an ever increasing complexity and, finally, to installations with controlled illumination and sound: playing with light as a poetic playground for our sensory perception.

*LUMEN LUMINIS* is the fruit of many years of creative collaboration of Wolfgang Trettnak and Paul O'Leary and is based on their prior scientific experience on light and luminescence: on luminescent dyes, their properties, their applicability to measurement techniques (so-called “sensors”) and the development of suitable instrumentation.