

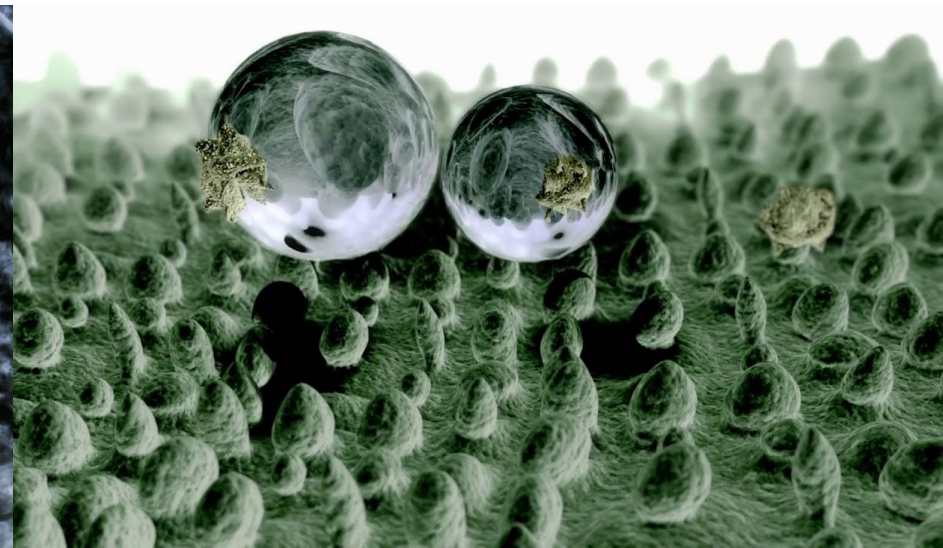
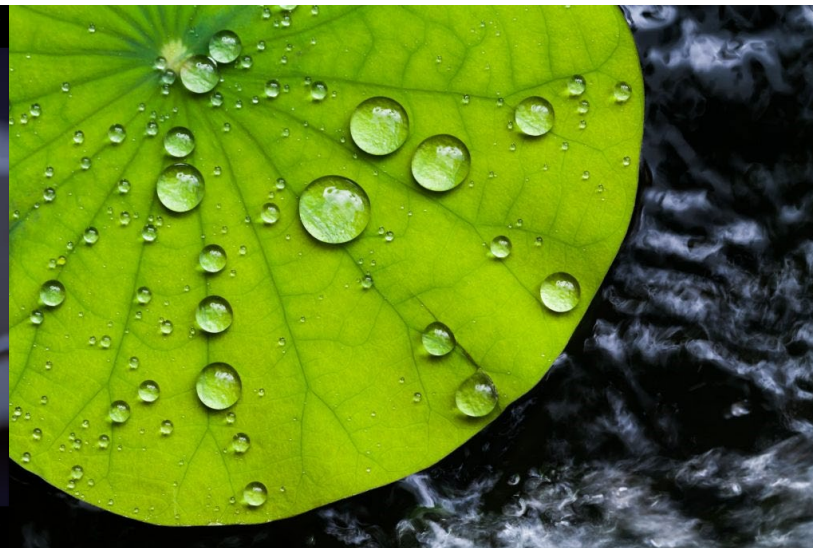
# Biomimicry in health/wealthcare



# Smart Materials- lotus effect self cleaning

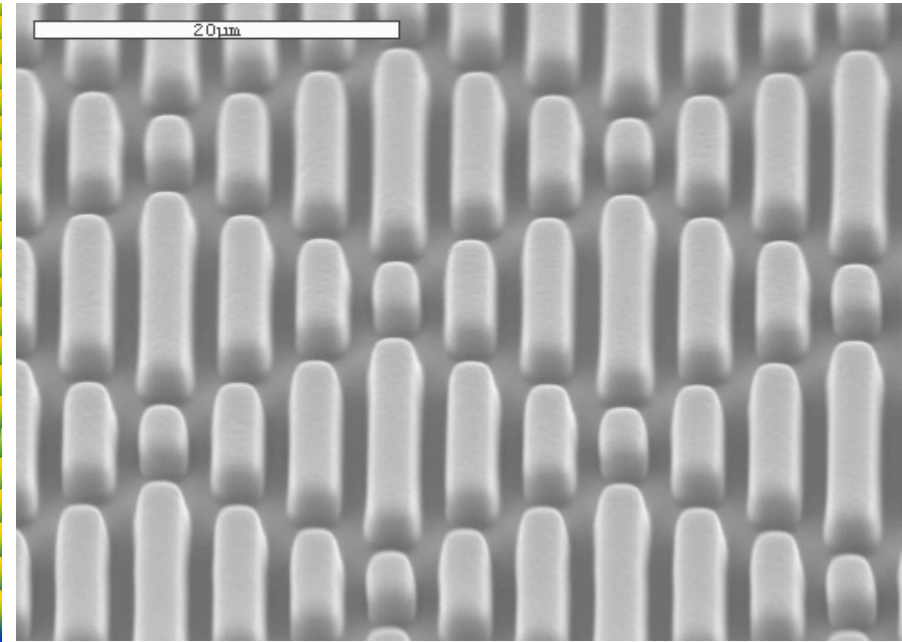
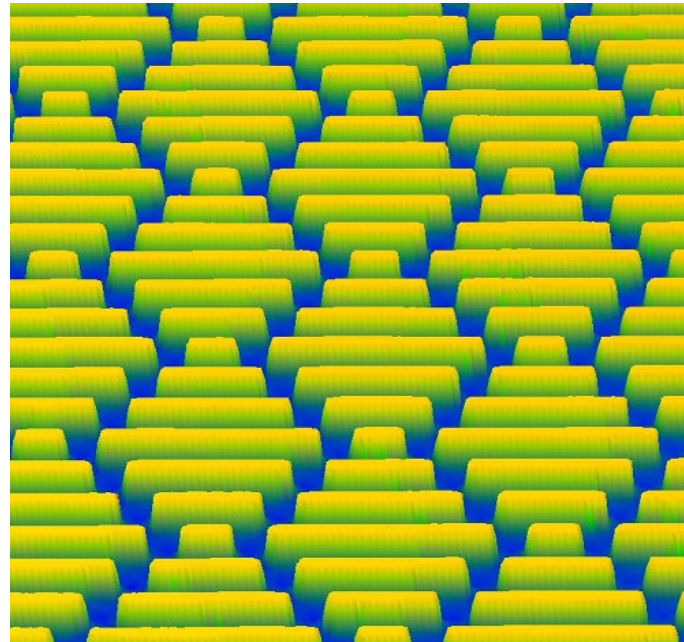
**PROPERLAUK LTD**<sup>®</sup>  
SUPER HYDROPHOBIC COATINGS

Smart Materials Inspired by Plant Leaves: Some plant leaves have the ability to self-clean by repelling water and dirt. These materials have a special coating that repels water, dirt, and debris, keeping the Surface cleaner for longer periods and reducing the need for frequent washing.



# Shark Skin- sharklet antibacterial Surface

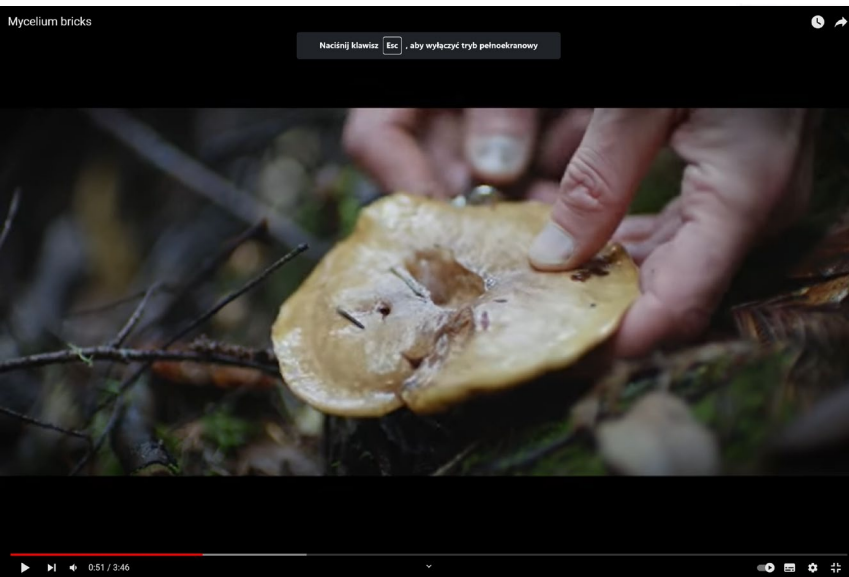
The primary Sharklet micropattern is very small – about 3 microns tall and 2 microns wide. You cannot see the micropattern with the naked eye and you can't feel it with your finger, but it's there, protecting the surface against bacteria and other microorganisms.



# Mycelium biodegradable materials



The resulting mycelium-based material can be molded into various shapes and forms to create packaging, insulation, building materials, and even consumer products. The products are biodegradable, compostable, and have a lower carbon footprint compared to traditional materials.

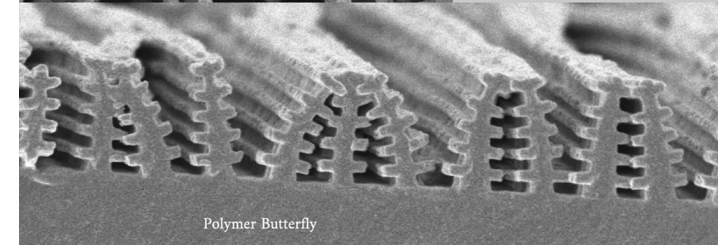
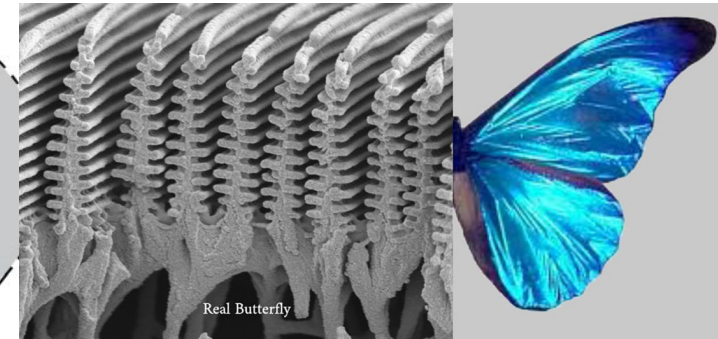
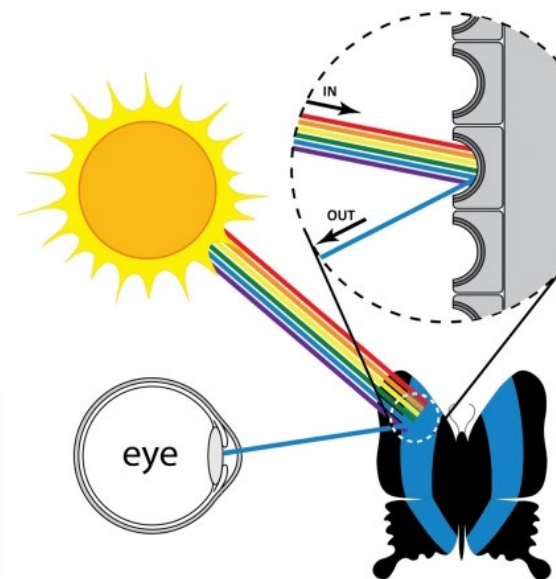
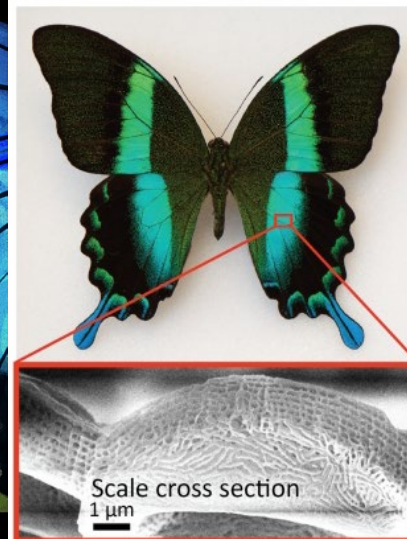
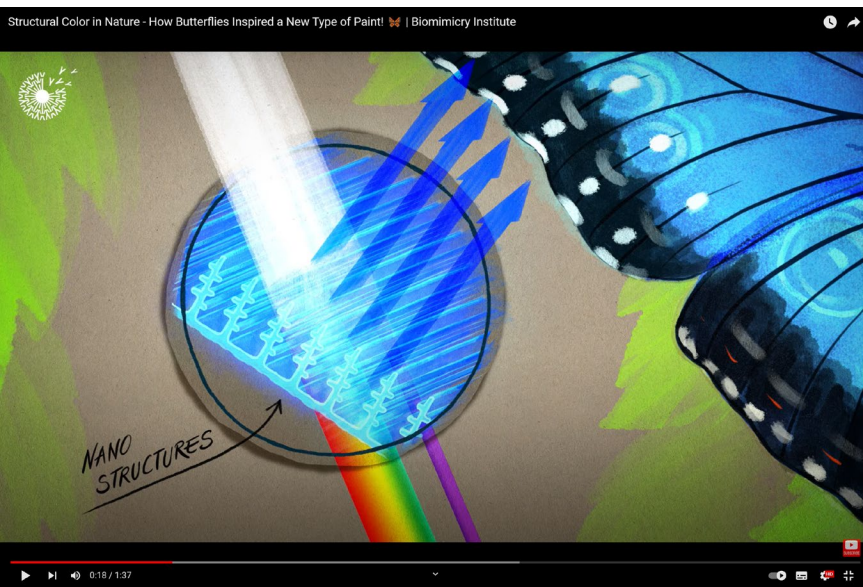


# Structural colour- morphotex colour without pigment



CYPRI

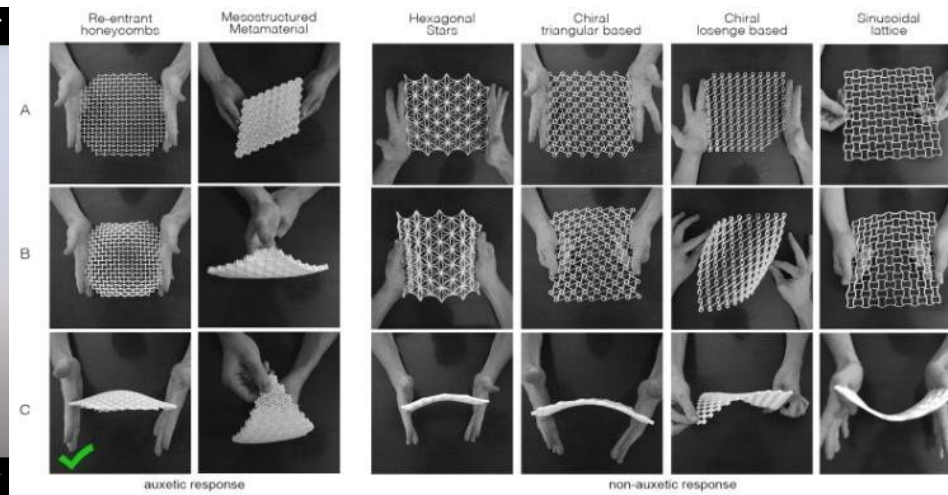
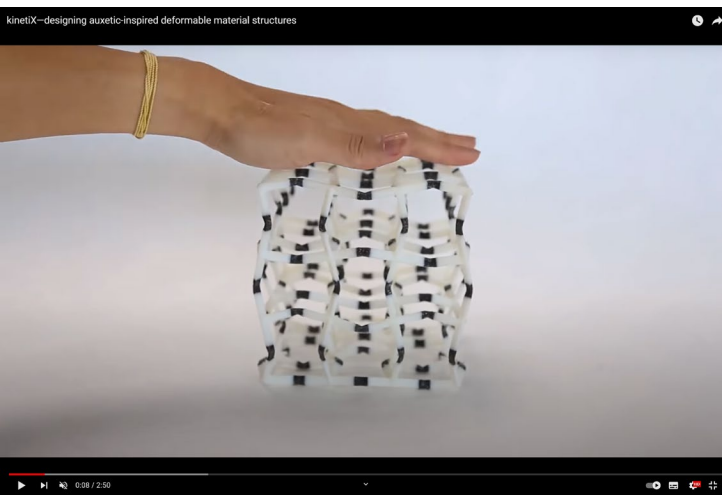
Butterfly wings display vibrant colors without using pigments. Instead, their colors are a result of light interacting with microscopic structures on the wing surface. This phenomenon, known as structural color, has inspired the development of unique pigments and coatings.



# Auxetic materials

material efficiency, lightweight

Auxetic materials have the potential to revolutionize the industry. These materials expand in multiple directions when stretched, offering enhanced safety, comfort, and performance. They can absorb impact energy, making them ideal for bumpers and crash structures, dampen vibrations, reducing noise in interiors.



# Bioluminescence- indigo

## healing light



Indigo project is a software based on mimicing the light patterns and interactions represent by bioluminescent creatures. Is kind of sensual teraphy condensed to the VR technology. It requires just the basic VR glasses and the software. It can be used by many people: ADHD, Autistic, after strokes, cereblar palsy, stress relief with fisical disabilities, people in coma who are very difficult to communicate with.

