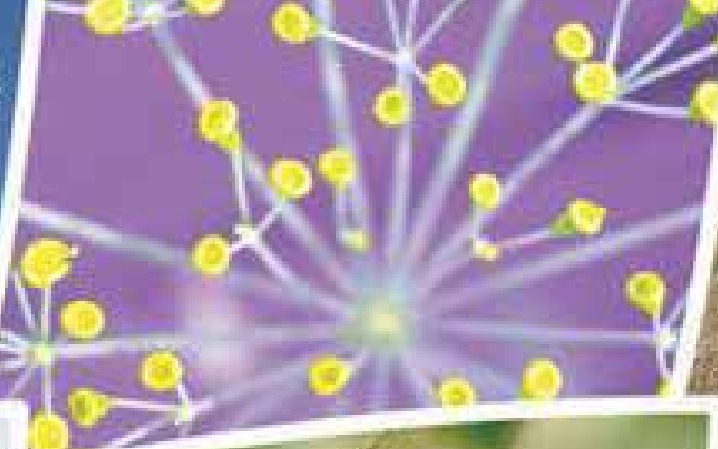


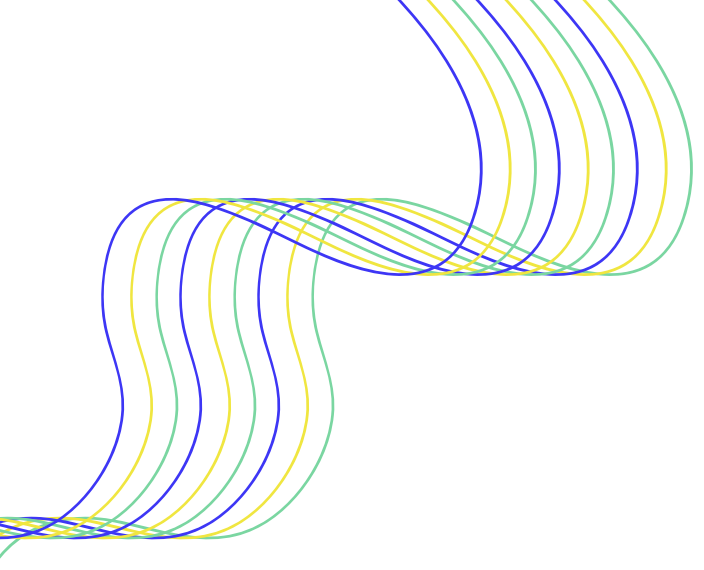
Nature knows the best

الطبيعة تعرف الافضل

Greenish clubs 2020

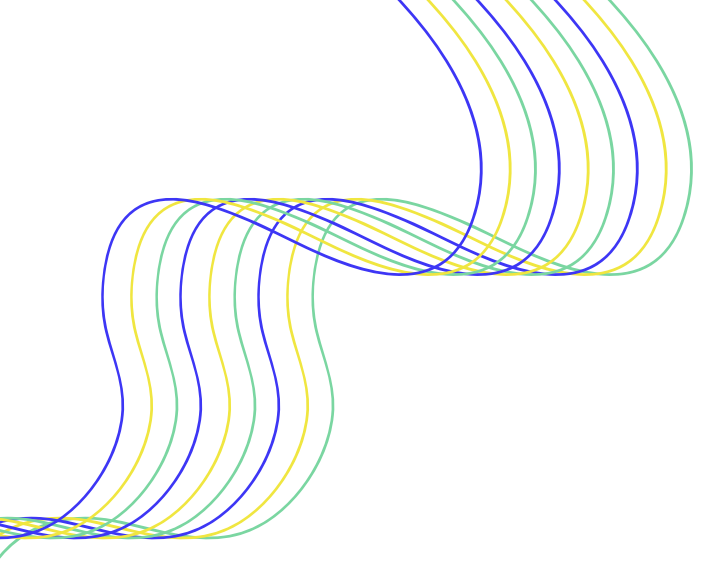






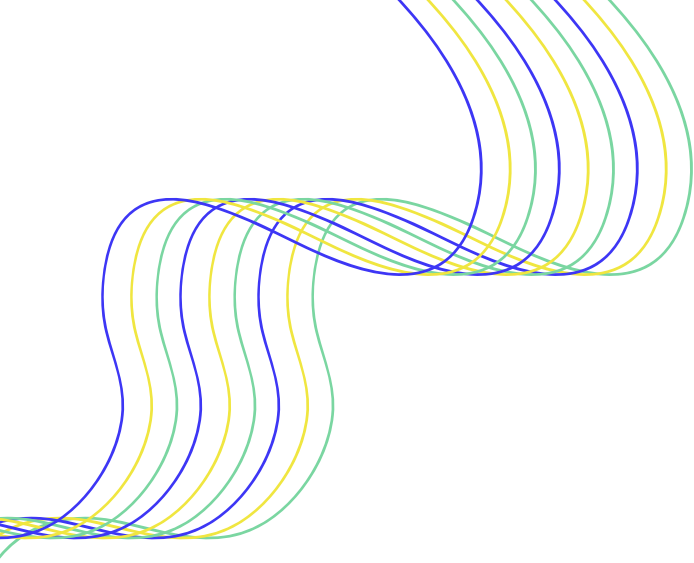
تاريخ محاكاة الطبيعة



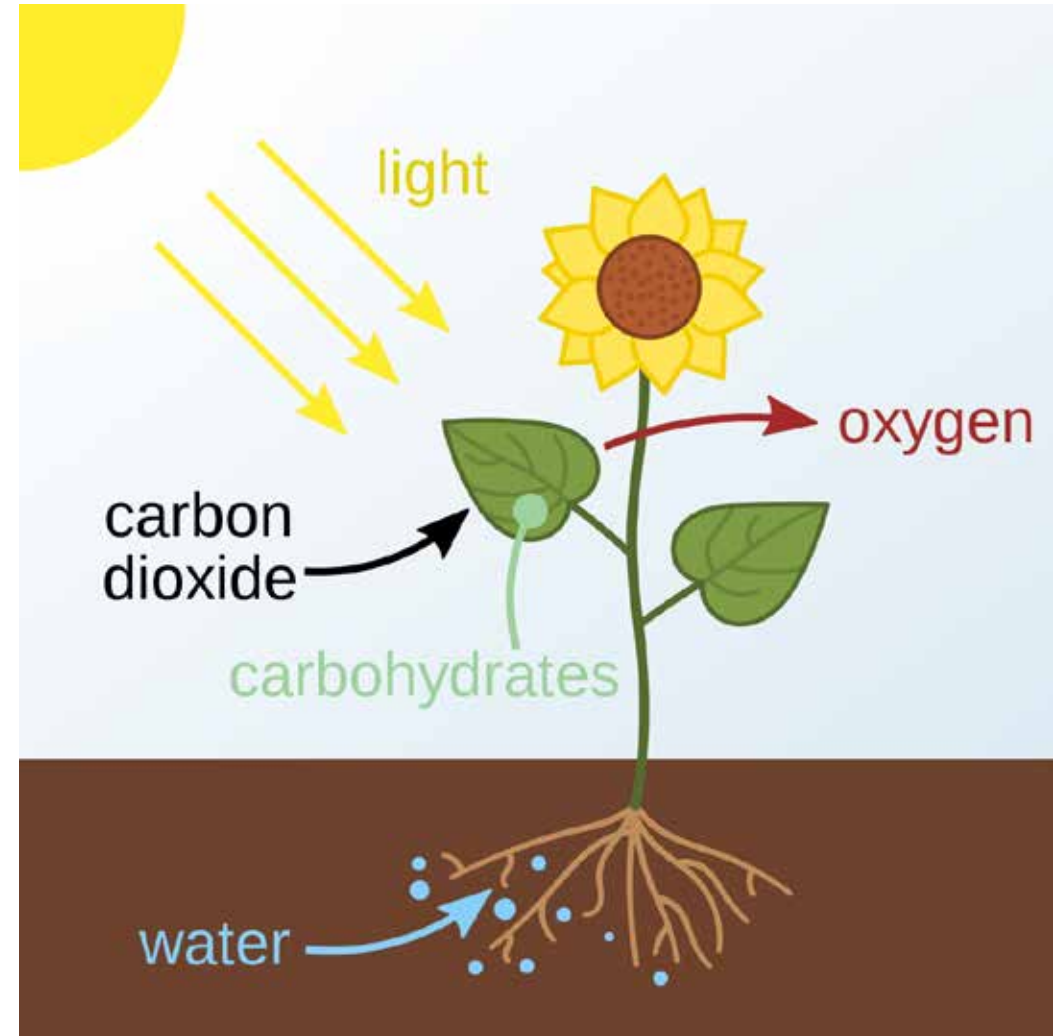


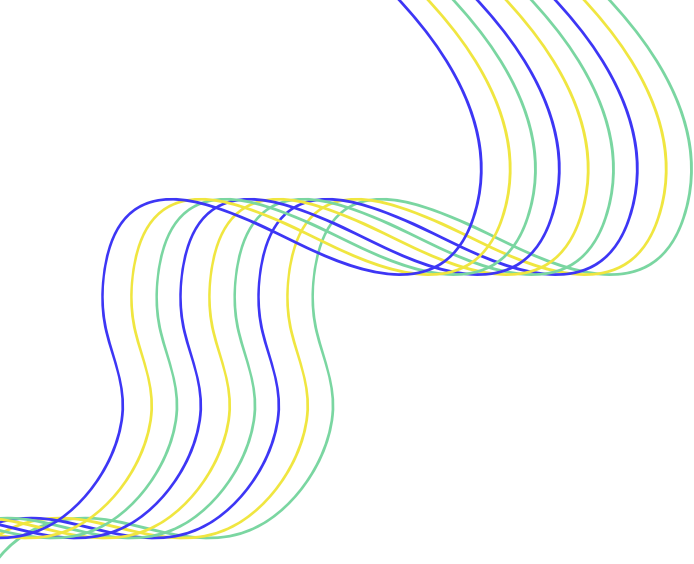
Bionics





Biomimetics





Biomimicry



Innovations inspired by nature



"new science that studies nature's models and then imitates or takes inspiration



from these designs and processes to solve human problems».



Nature as a «Model, Measure, and Mentor»



اشكال محاكاة الطبيعة

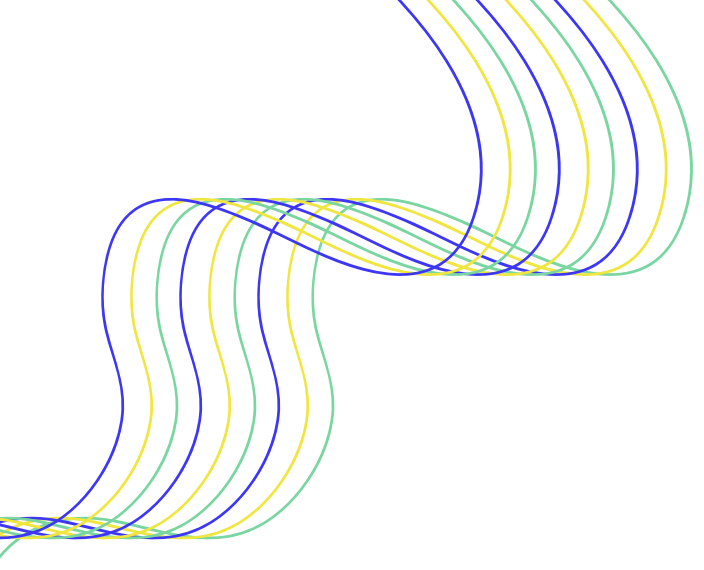
الطبيعة
كمرشد

الطبيعة
كنموذج

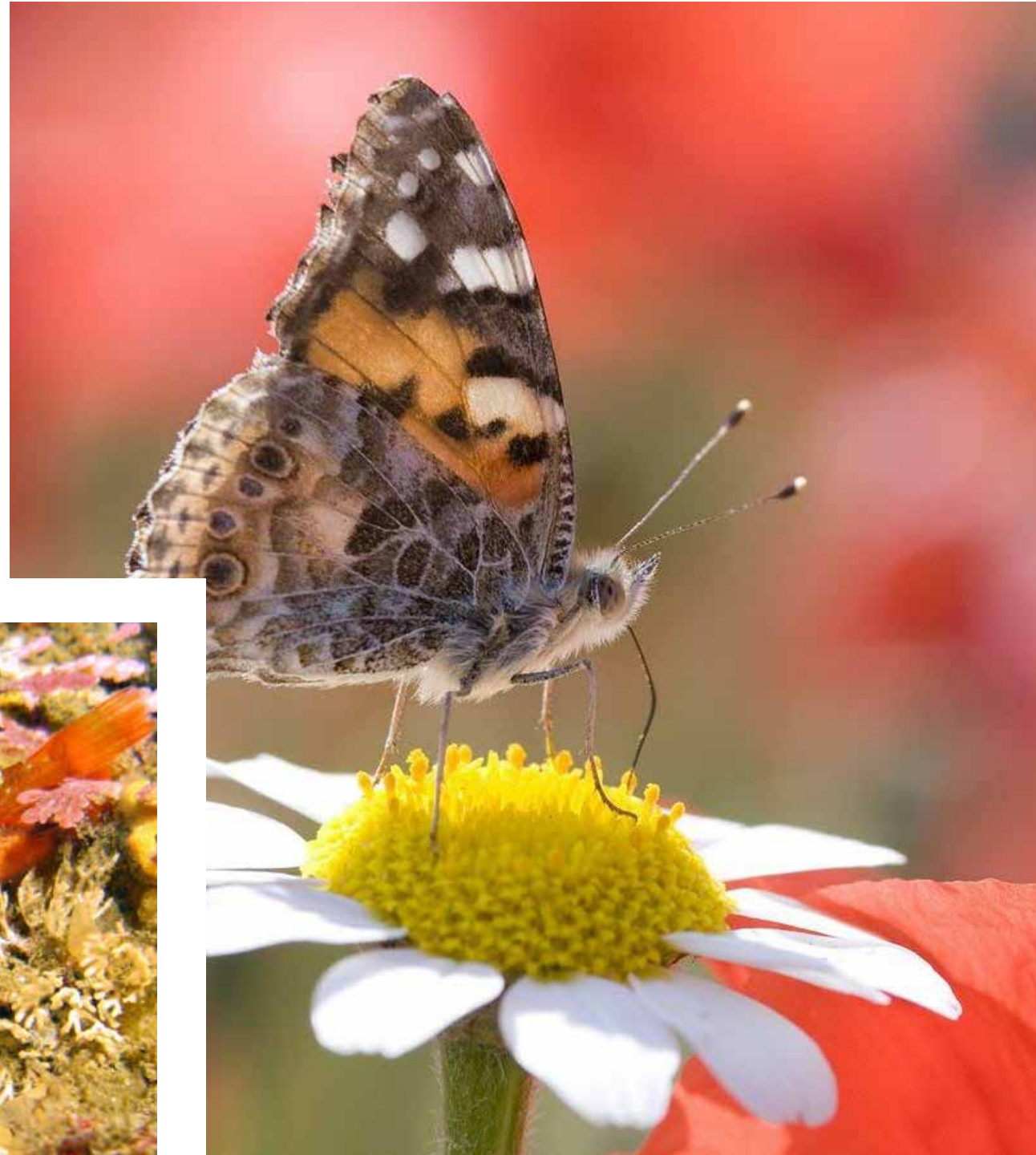
الطبيعة
كمقياس

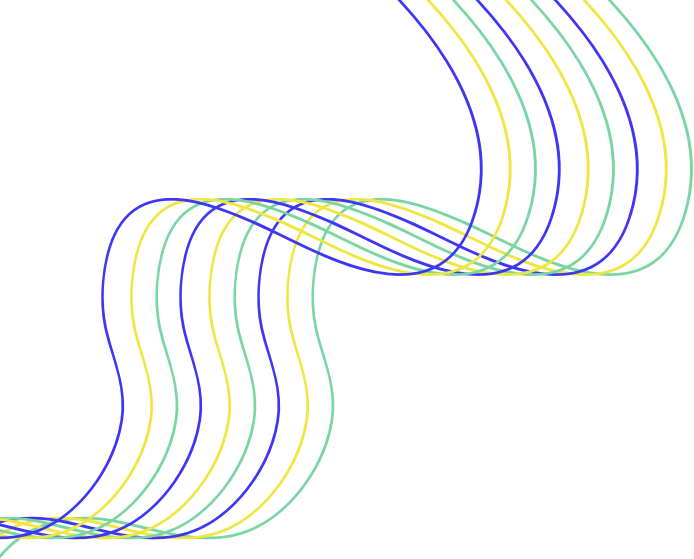
A 3D rendering of a puzzle with a red piece standing out from a grey base. The puzzle pieces are white and grey, with the red piece being the central focus. The background is dark grey with white wavy lines in the top left corner.

Need to biomimicry

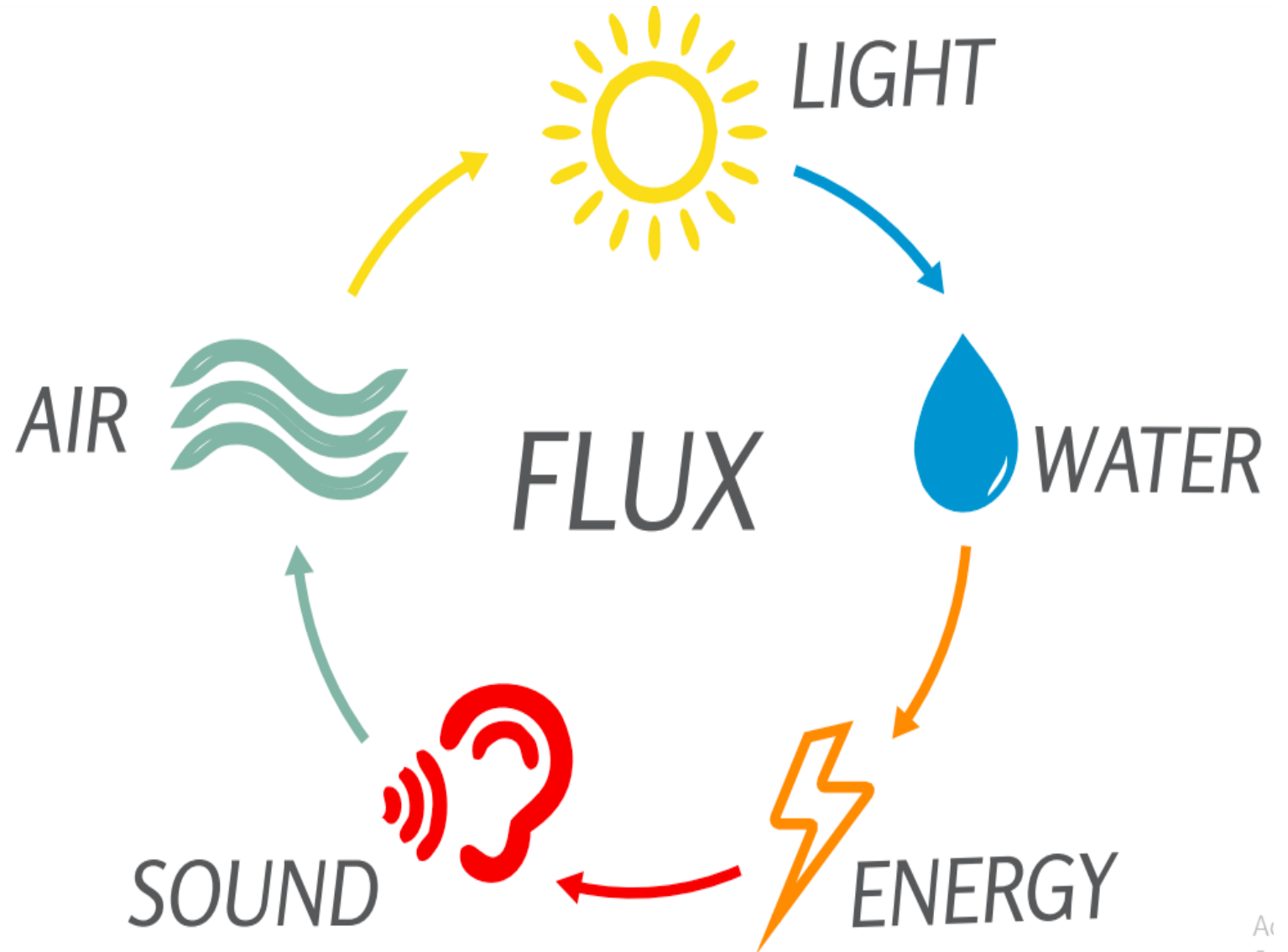


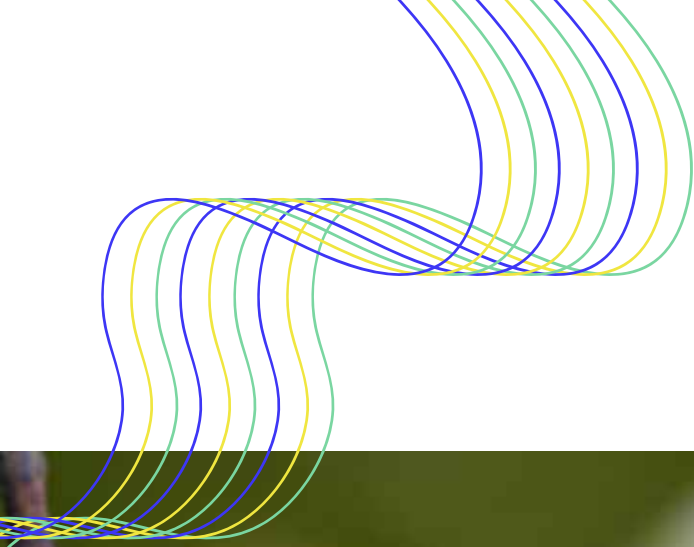
قوات الكائنات

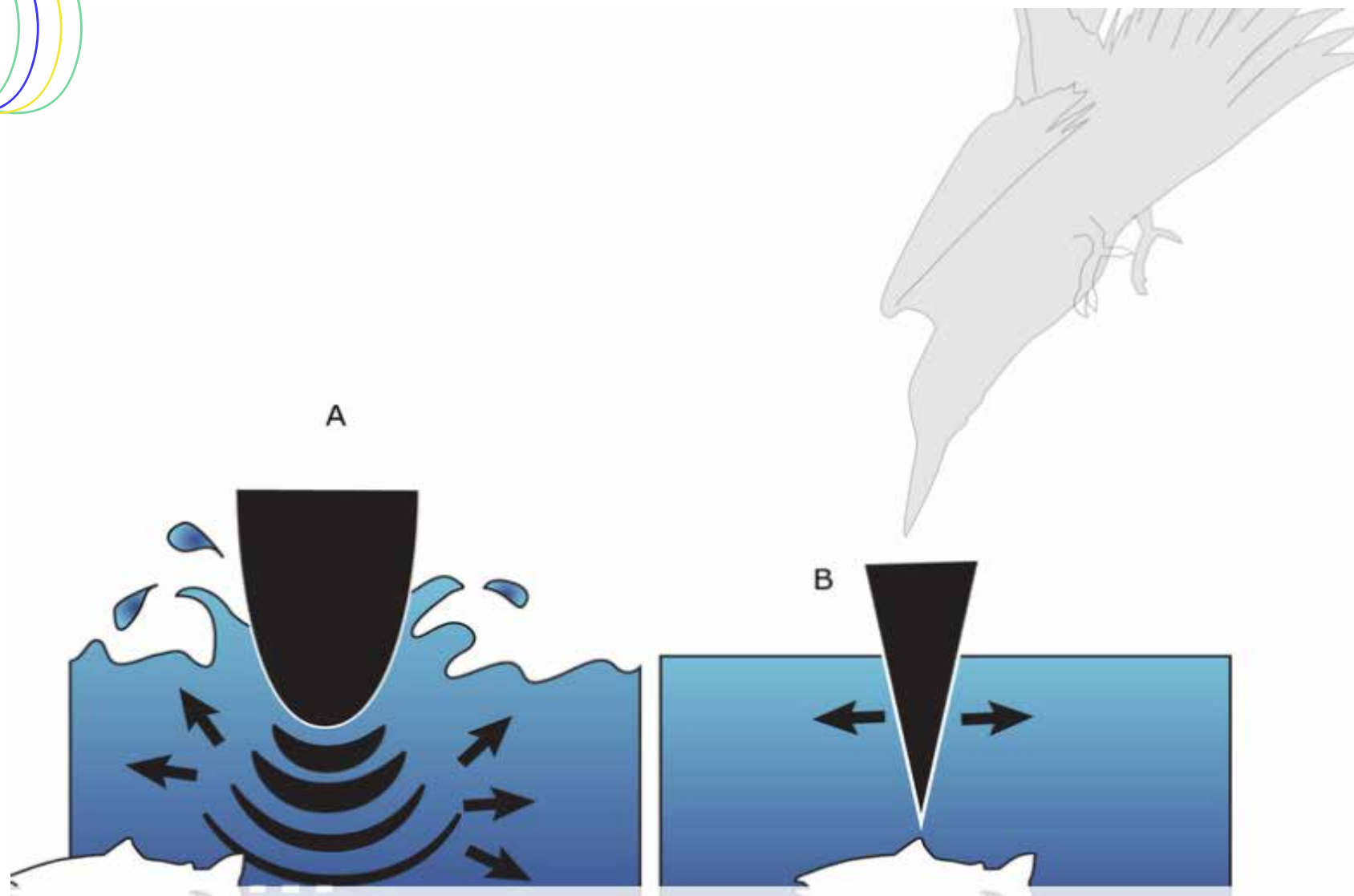
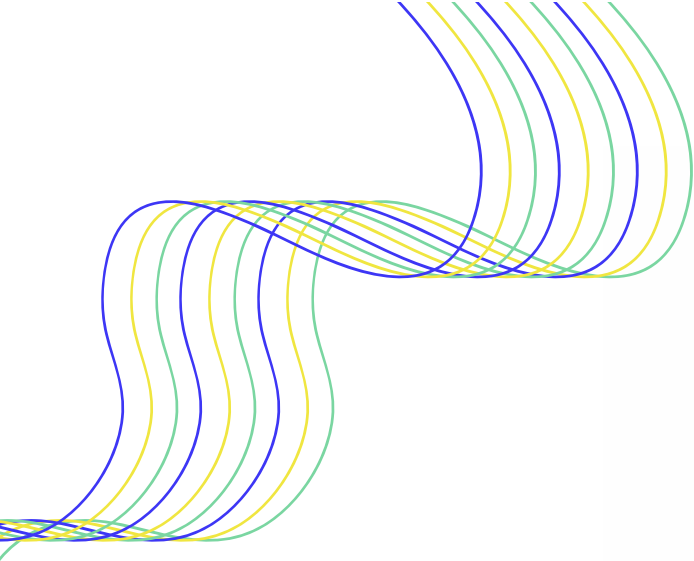


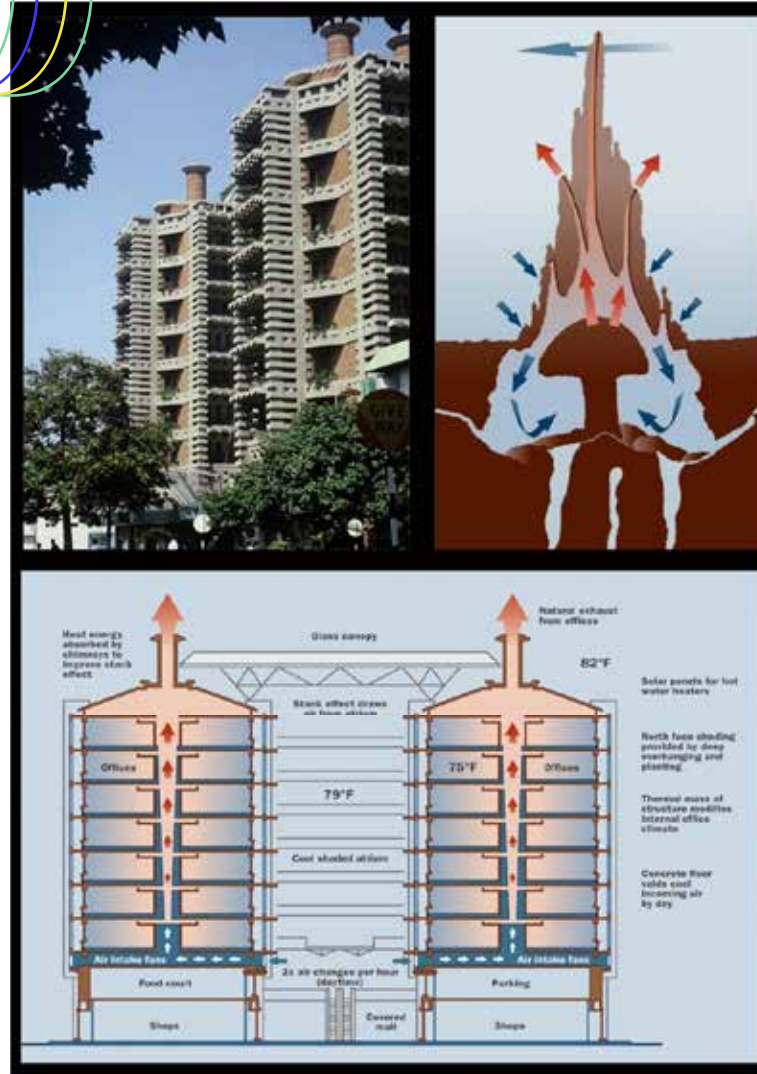
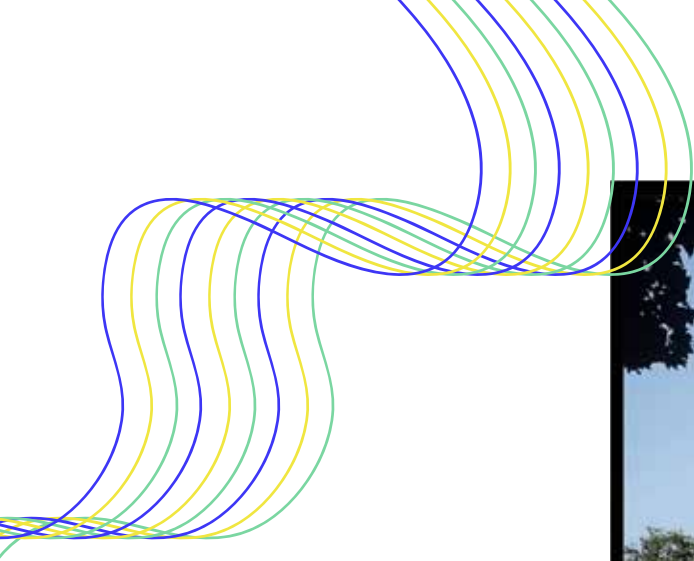


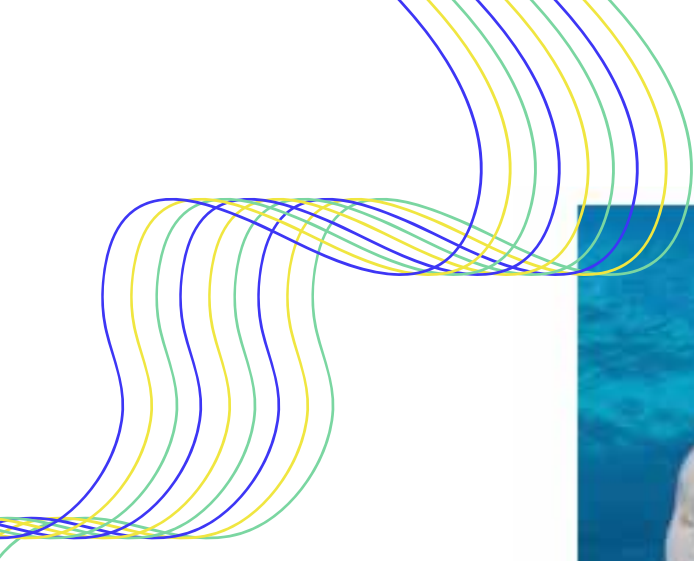
[https://biomimicards.com/
examples-biomimicry/](https://biomimicards.com/examples-biomimicry/)

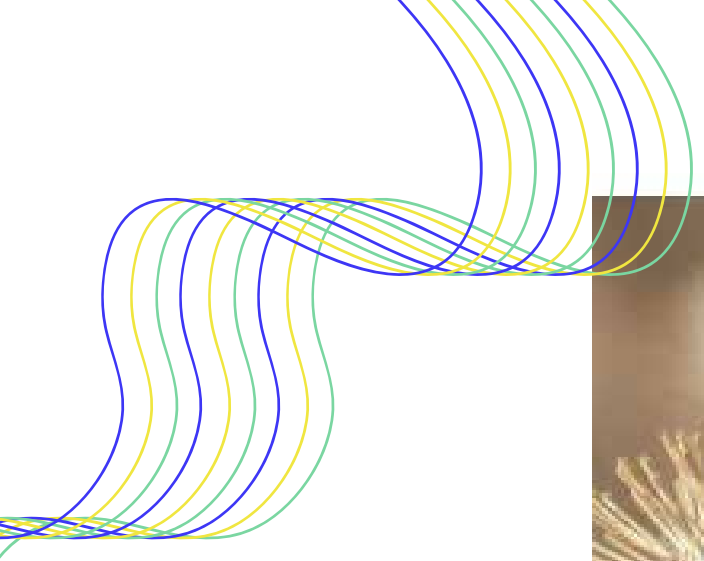


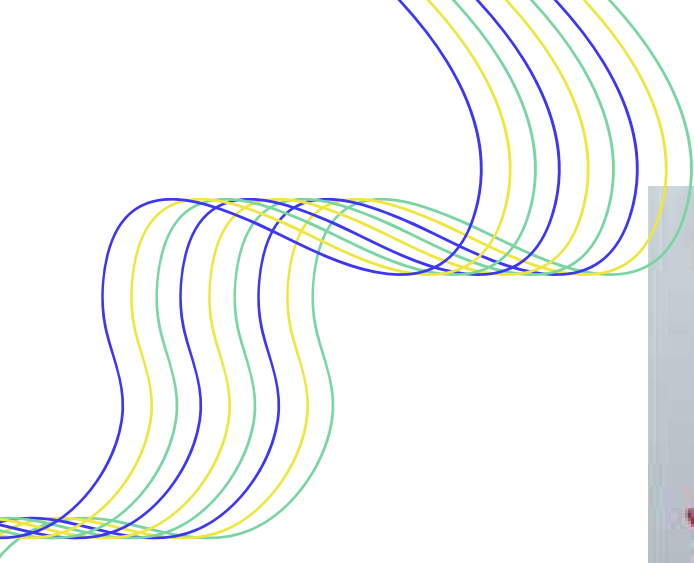


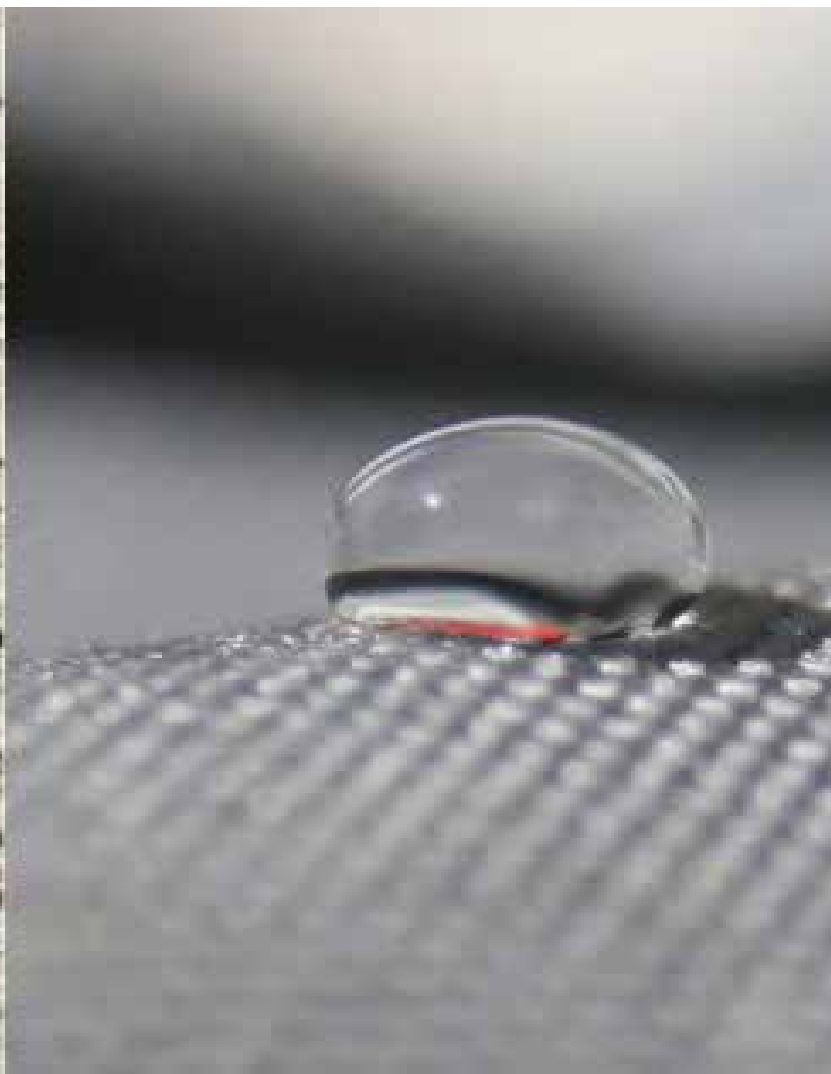
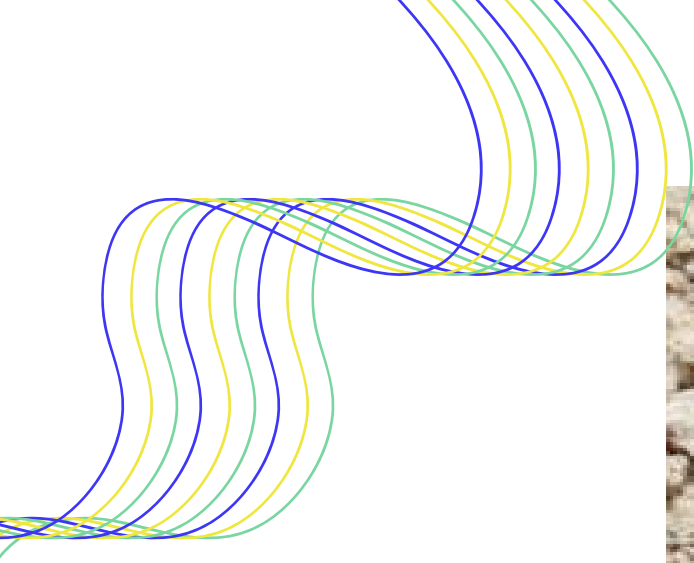






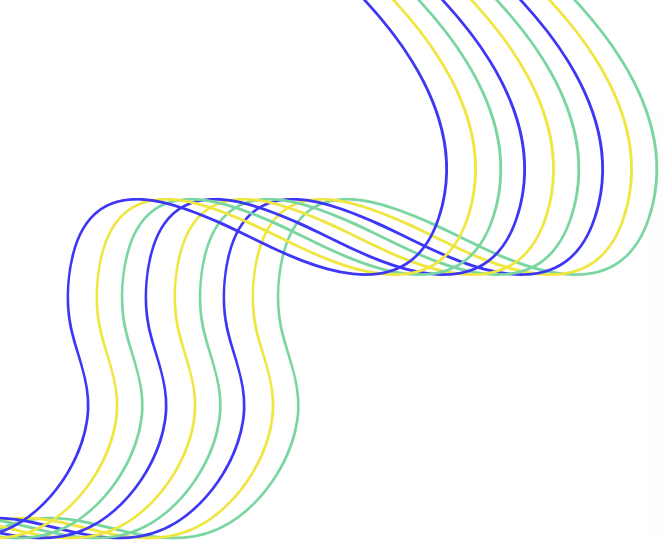








التعلم من الطبيعة



PRINCIPLES OF BIOMIMICRY

- Nature runs on sunlight.
- Nature uses only the energy it needs.
- Nature fits form to function.
- Nature recycles everything.
- Nature rewards cooperation.
- Nature banks on diversity.
- Nature demands local expertise.
- Nature curbs excesses from within.
- Nature taps the power of limits





مجالات استخدام مبادئ محاكاة الطبيعة

هندسة
معمارية

الكثرونيات

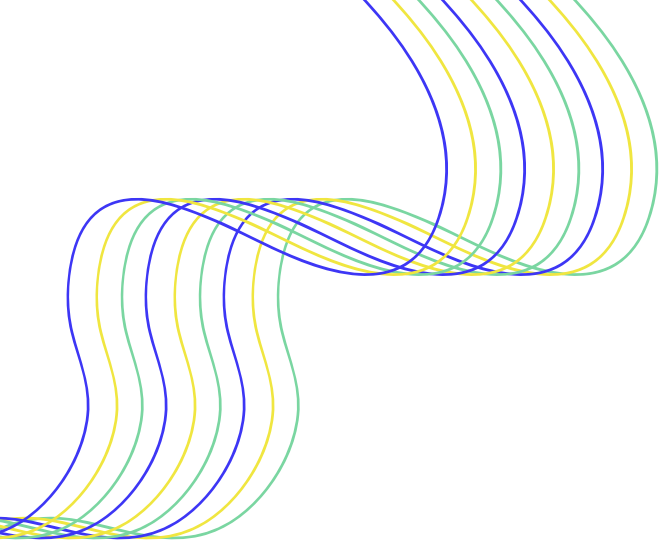
مواصلات

طاقة

اثاث
منزلي

صحة
عامة

خامات
اقمشة



Man-made System

Simple, disconnected and mono-functional

Wasteful

Resistant to change.

Long-term toxins.

Centralised/Mono cultural.

Fossil fuel dependent.

Maximum of one goal.

Extractive

Biological System

Complex, interconnected and symbolic.

Zero waste.

Adapted to constant change.

No long-term toxins.

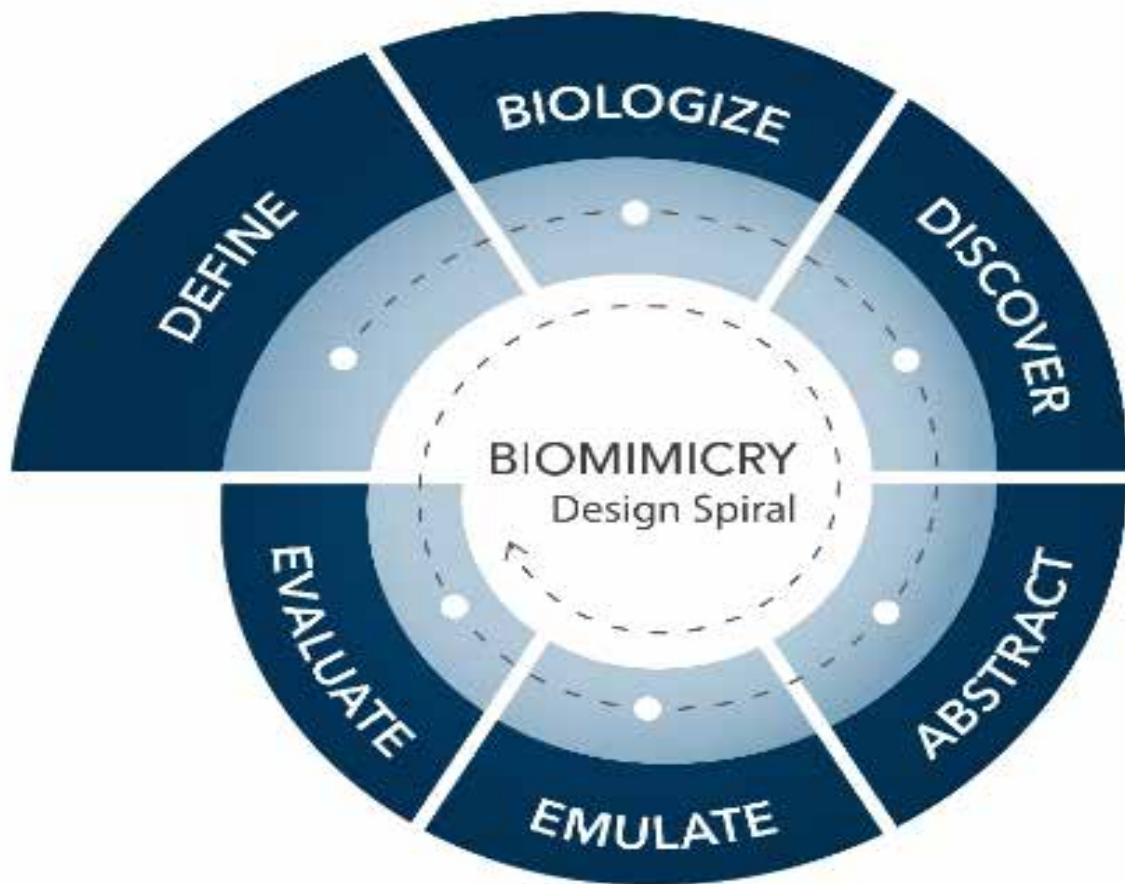
Distributed and diverse.

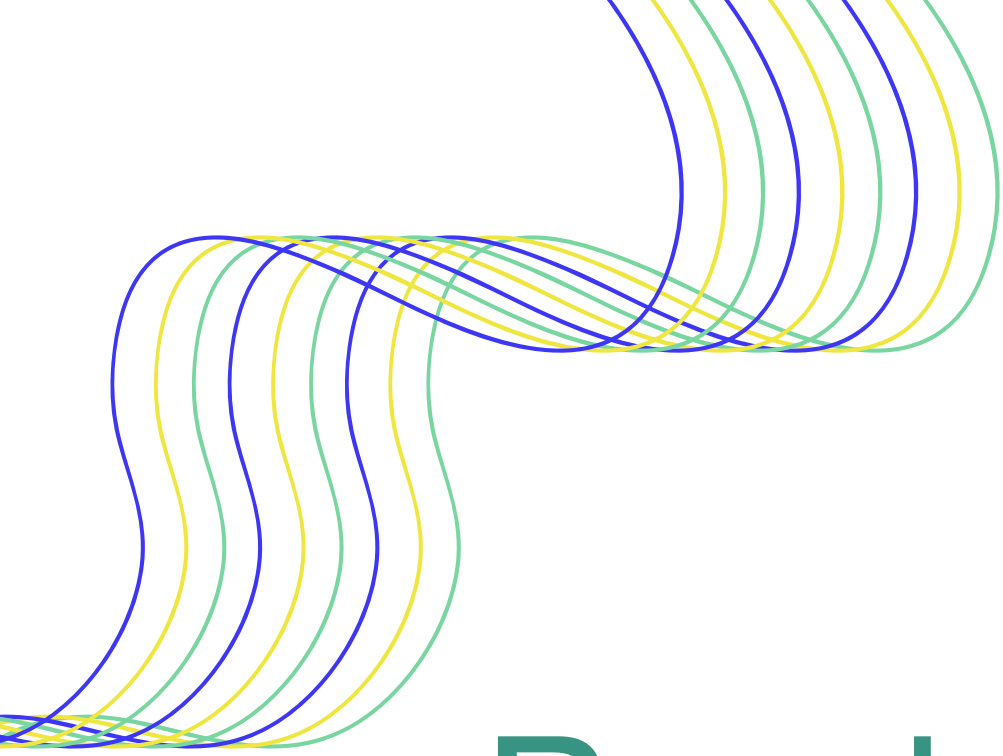
Run on current solar income.

Optimised as a whole system.

Additive.

عملية تصميم المحاكاة البيولوجية





Break

Ready for the tool fair!!