



WARSAW  
UNIVERSITY  
OF LIFE SCIENCES

# NATURE AS AN INSPIRATION AND SOURCE OF CREATIVITY IN BIOECONOMY EDUCATION



Presented by:

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# BIOECONOMY

- covers all sectors and systems that rely on biological resources (animals, plants, micro-organisms and derived biomass, including organic waste), their functions and principles.
- includes and interlinks: land and marine ecosystems and the services they provide;



**all primary production, sectors that use and produce biological resources (agriculture, forestry, fisheries and aquaculture);**



**all economic and industrial sectors that use biological resources and processes to produce food, feed, bio-based products, energy and services**



**needs to have sustainability and circularity at its heart**

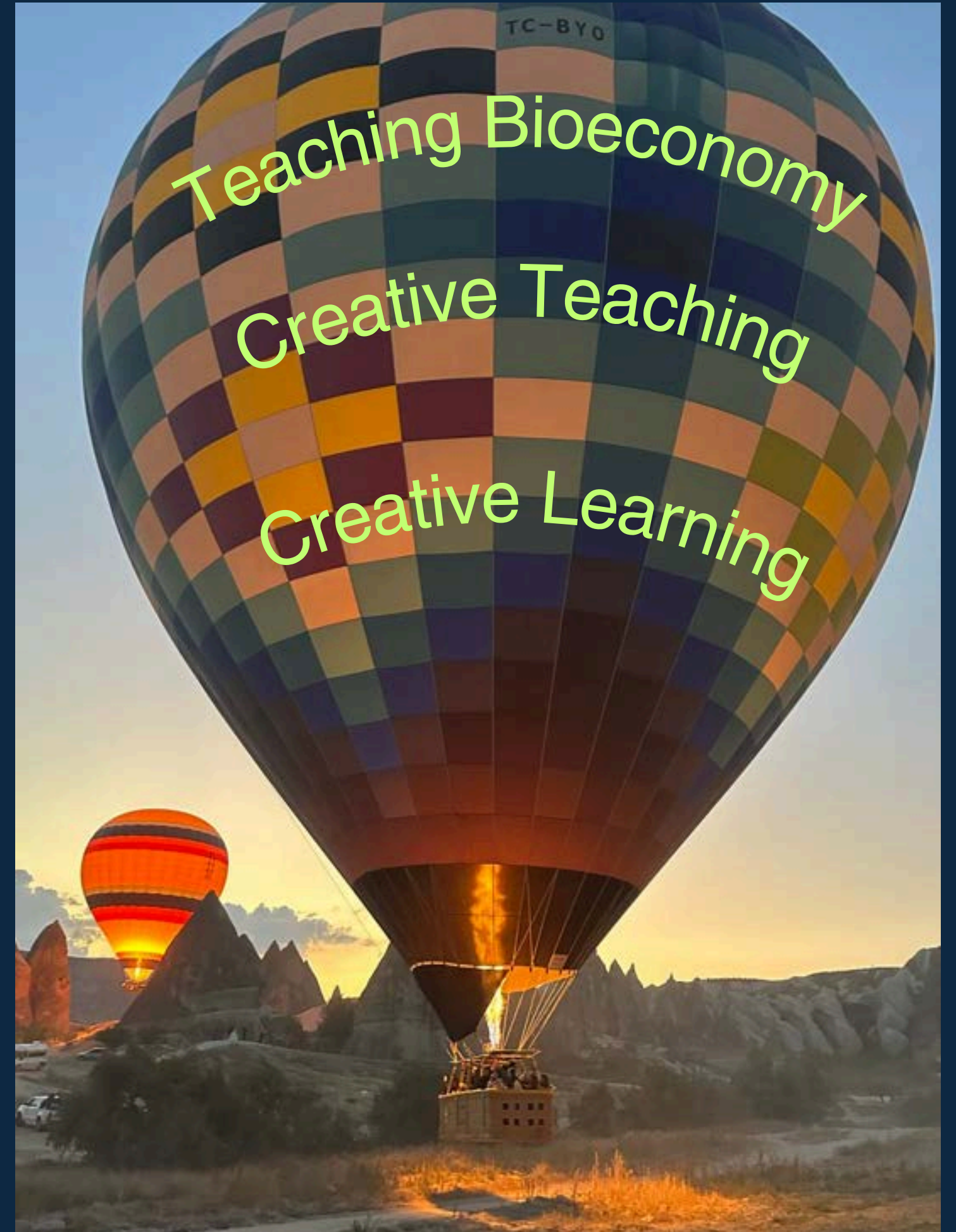




# BIOECONOMY TEACHING AND ITS GOALS

Creative Learning can be seen as an **event** or a **product** (although it may involve either or both), but also a **process**, **practice** or a **state of mind** (disposition) involving the serious play of ideas and possibilities and tolerance of ambiguity.

This generative, problem-finding/problem-solving process may involve cognitive, emotional and social factors, along with rational and non-rational thought and may be fed by the intuitive, by daydreaming and pondering, as well as by the application of knowledge and skills.





# CREATIVITY



Read shit. And you think shit. And you'll create shit

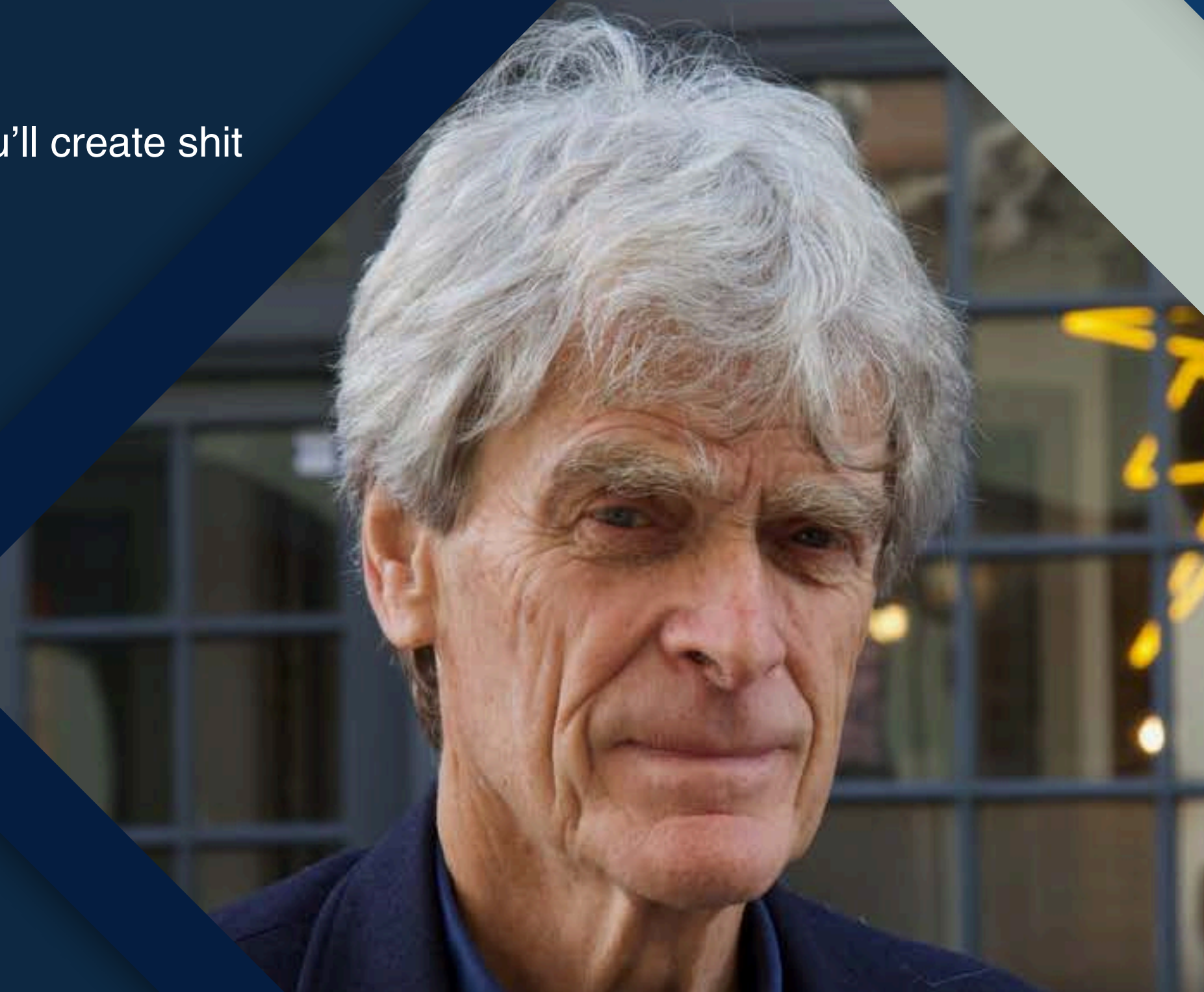


Motions are contagious, so be optimistic or at least surround yourself with optimists



Be inquisitive. Too often we feel silly asking the simplest question “why?”

Sir John Hegarty  
advertising executive and a founder of the agency  
Bartle Bogle Hegarty





# NATURE CULTIVATES CREATION AND IMPROVES CREATIVITY



Experience of nature through all the senses helps create cognitive models necessary for continuous intellectual development, stimulates imagination.



Creativity improves in natural settings or the presence of natural elements.

The most important influence of the natural environment on creativity is at the creative idea stage (i.e., in the incubation period), including getting inspiration and problem-solving. Nature beneficially enhances creativity, new ideas, and flexible thinking, while improving our attention to analyze further and develop ideas.





# ATTENTION RESTORATION THEORY (ART)

(Rachel, Stephen Kaplan 1989. The Experience of Nature: A Psychological Perspective)



EFFORTLESS (INNIVOLUNTARY) ATTENTION



DIRECT ATTENTION



# NATURE AND CREATIVITY





# THREE TYPES OF INSPIRATION FROM NATURE



biomimicric - nature as model



nature-based solutions - nature as solution/provider



systems thinking - nature as system





# EDUCATIONAL PROJECT

## ECO-PRINT IN NATURE





# ECO-PRINT IN NATURE





# EDUCATIONAL PROJECT

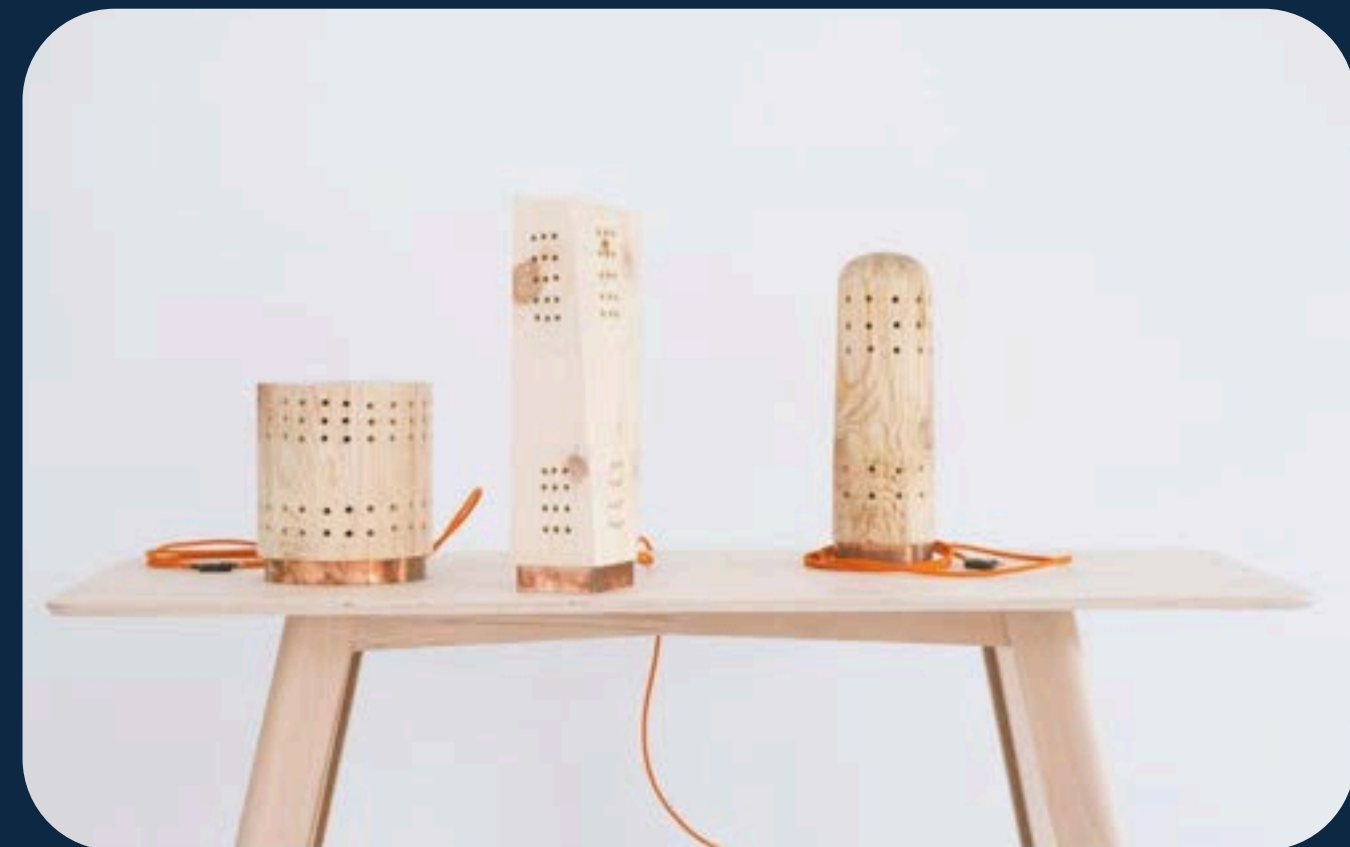
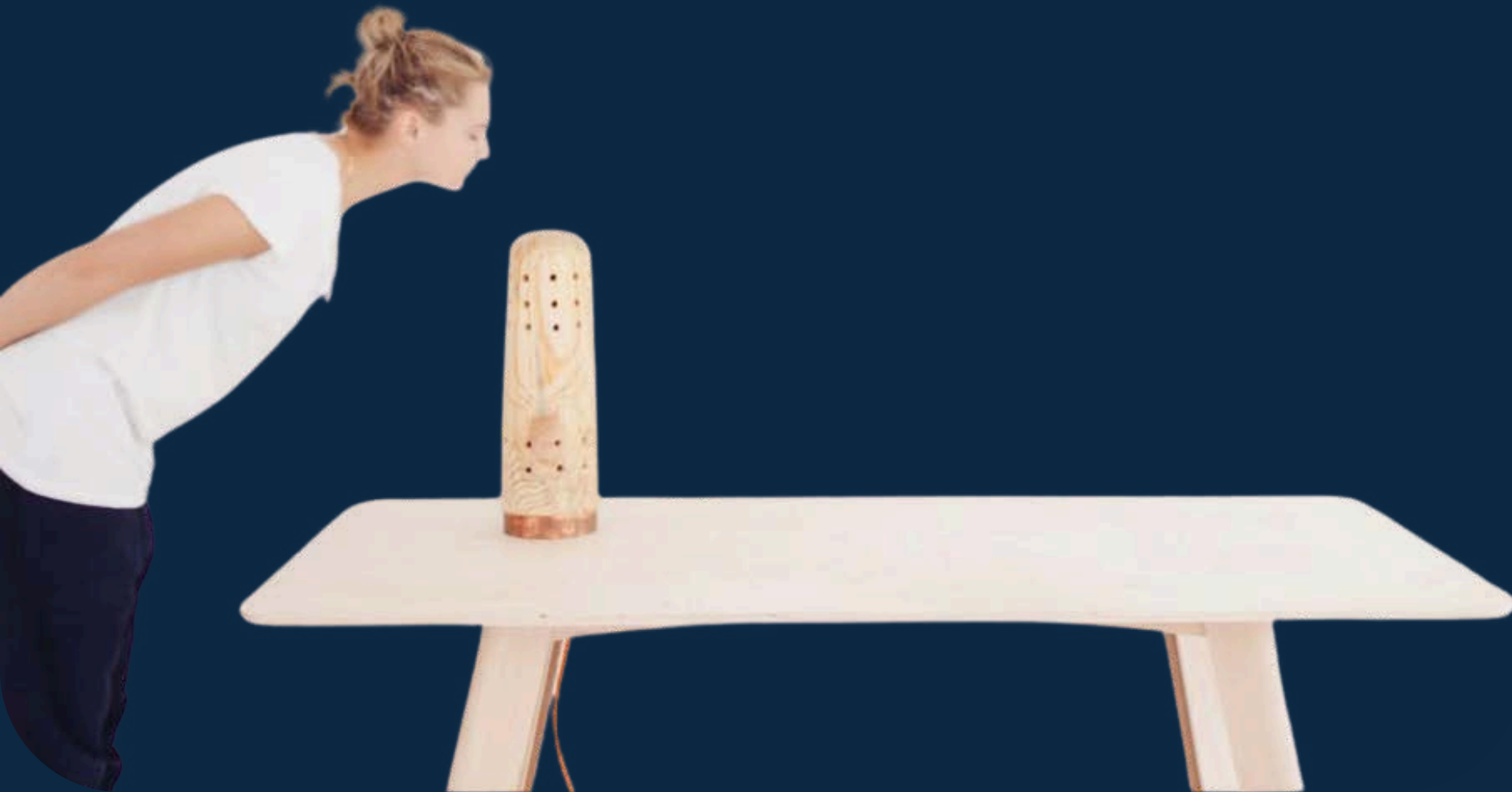
## ECO-PRINT IN NATURE





# NATURE AND CREATIVITY

## AROMA LAMP



student project: Magda Rychard  
supervised and supported by: Marcin Zbieć and Andrzej Mazurek



# THANK YOU

## FOR YOUR ATTENTION



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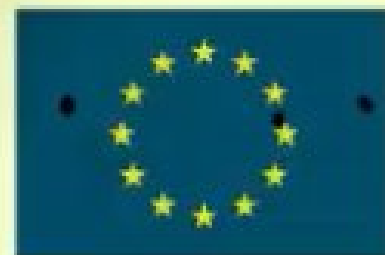
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<https://cl4bio.web.ua.pt>



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# **CL4BIO'23** **SUMMER SCHOOL**

Present



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GOSPODARSTWA  
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universidade  
de aveiro

ValueD●

<https://www.youtube.com/watch?v=zz0iiXfW9AE>