

SWEDISH  
ALGAE  
FACTORY



Advanced Materials from Algae

SWEDISH  
ALGAE  
FACTORY

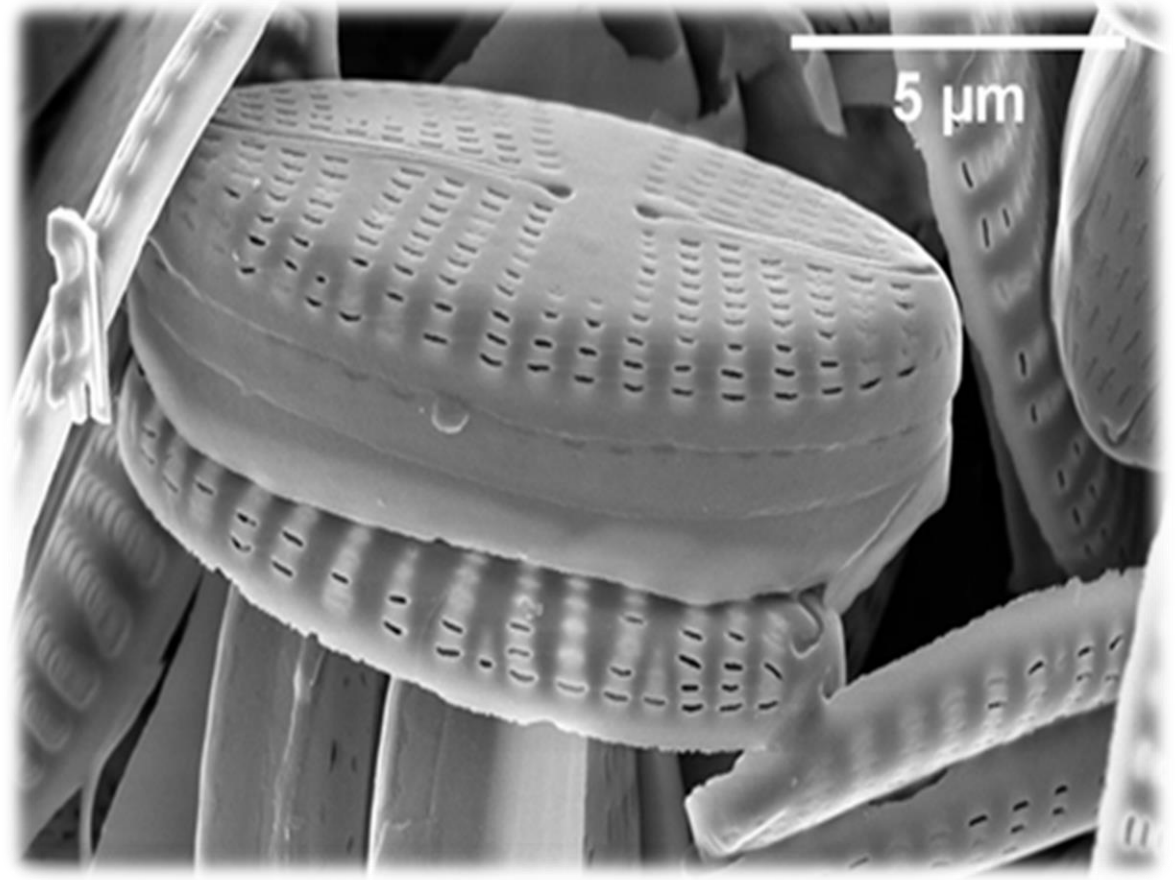
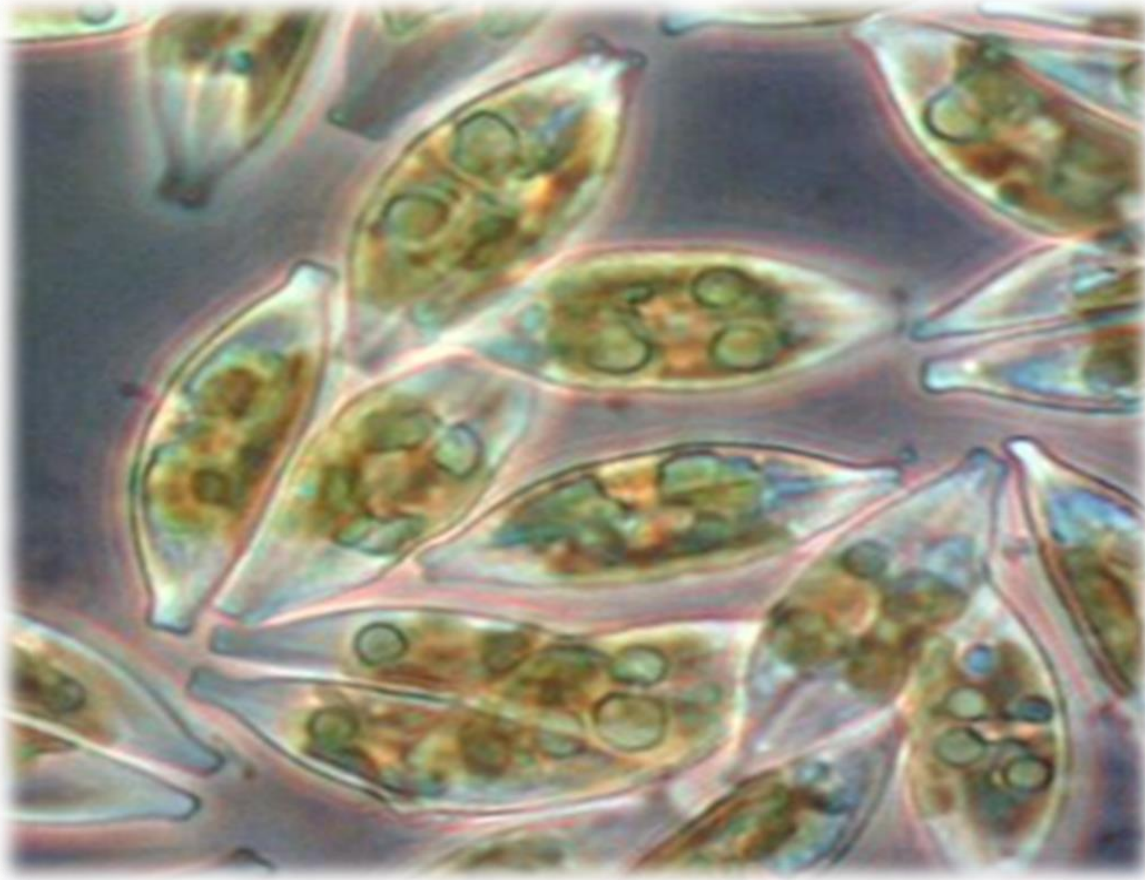


## Our Mission

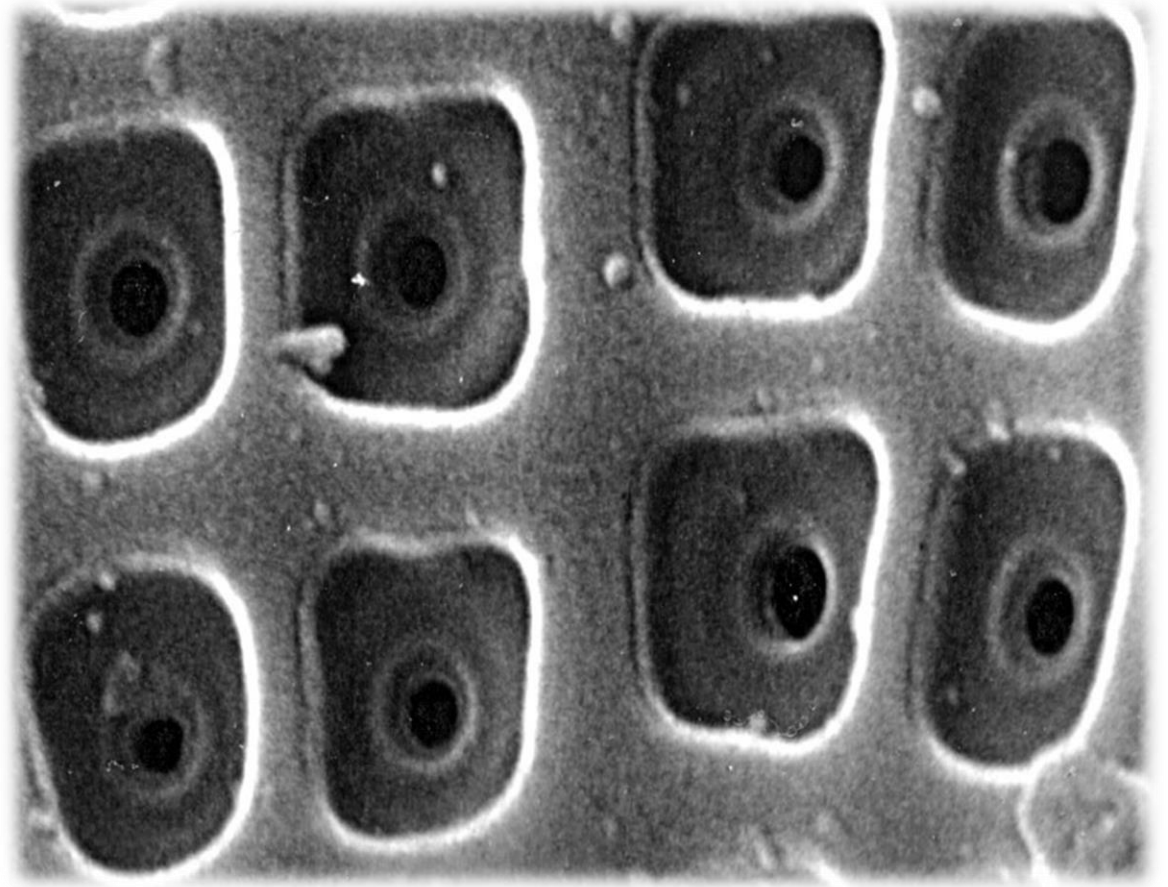
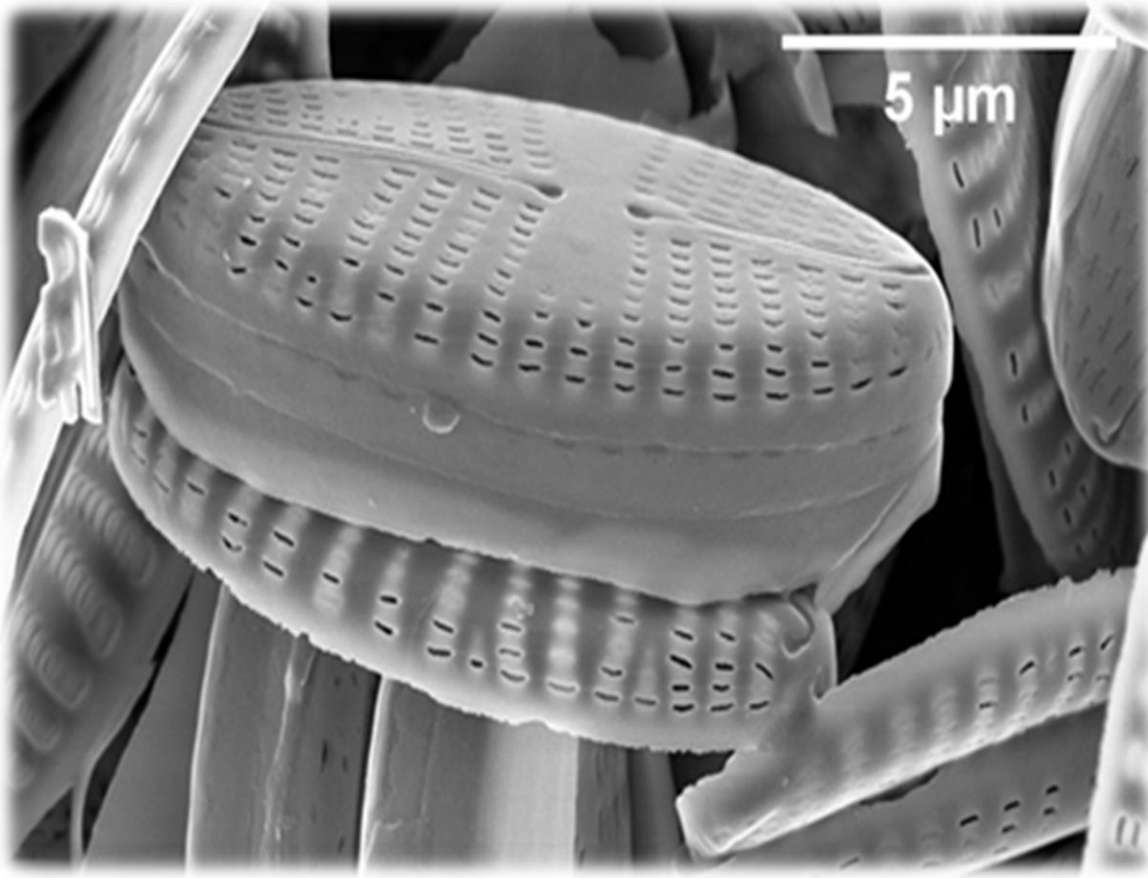
Be the world-leading producer of advanced materials from algae  
and a driving force towards a circular and bio-based industry



# WE CULTIVATE DIATOMS, A TYPE OF ALGAE

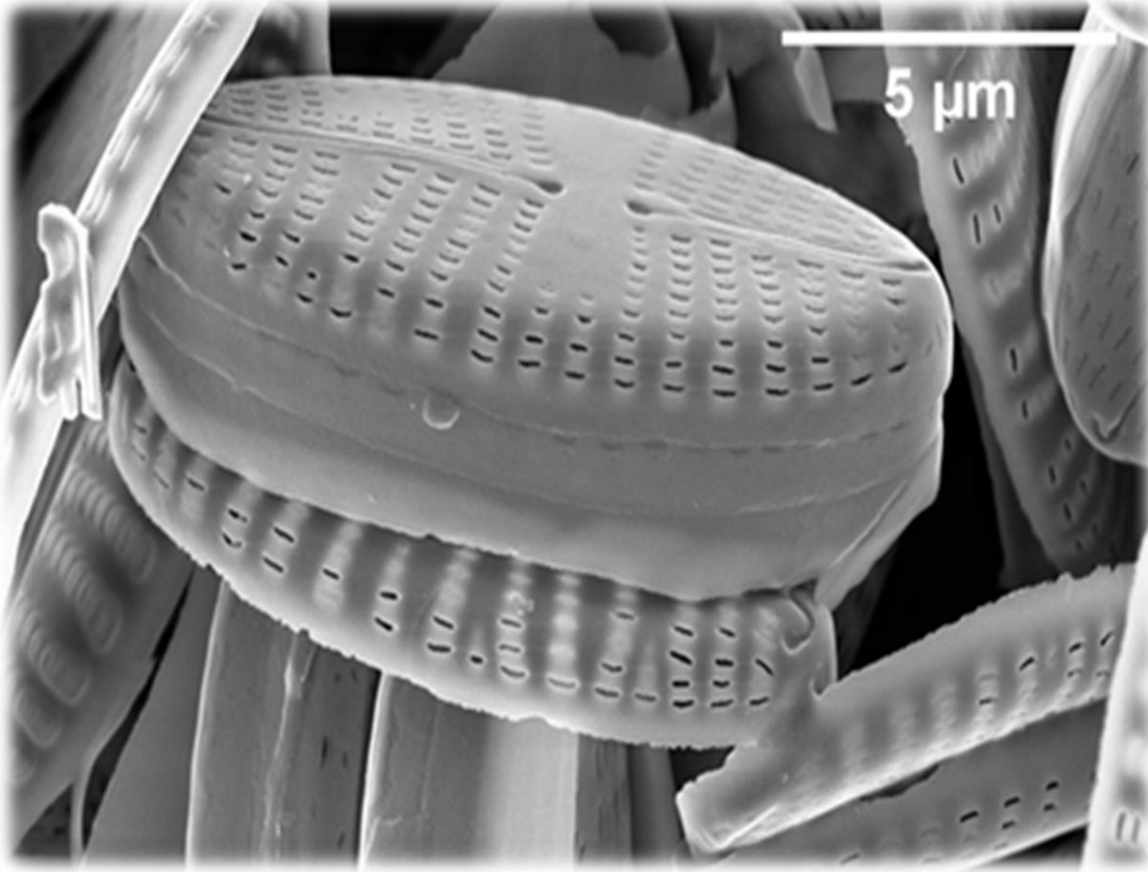


# NANOPOROUS STRUCTURE OF DIATOM SHELLS

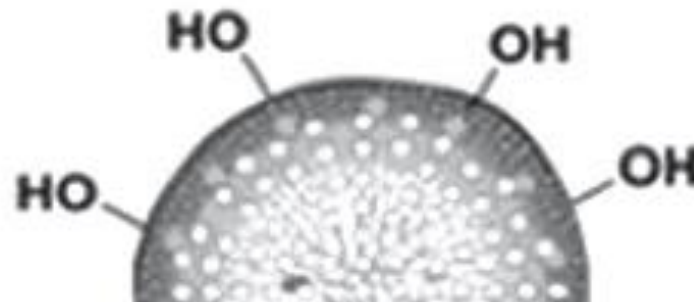




# THE SHELL ENABLES SURVIVAL



- Traps visible light efficiently
- Blocks harmful UV light, partly by manipulating UV light to visible light
- Absorbs and releases nutrients and water efficiently



# SELLING TO SKIN CARE + PARTNERSHIPS IN SOLAR

## Skin care and cosmetics



Natural and efficient:

- Moisturizer
- Absorbent
- UV filter



Sales started in autumn 2018.

Customers:

**L: A BRUKET**  
EKOLOGISKA KURBADSPRODUKTER &  
BOTANISKA NJUTNINGSMEDEL

**TRUE  
ORGANIC**  
— OF —  
SWEDEN

**L'ORÉAL  
PARIS**

+ 20 with ongoing tests + more in pipe

## Solar energy



Enhances efficiency with at least:

- 4 % for silicon based solar panels
- 38 % for DSSC (Dye sensitized solar cells)

3 testing partnerships, each needing **200 kg -10 tons/year**. In discussions with 6 more actors.

**QUANTOII**

Research with among others:

**CHALMERS**  
UNIVERSITY OF TECHNOLOGY



## Future applications



Long-term opportunities in e.g.

- Lithium ion batteries, 40 % increased capacity of anode
- Biosensors
- UV filter in e.g. plastic films

Commercialization and collaboration with:



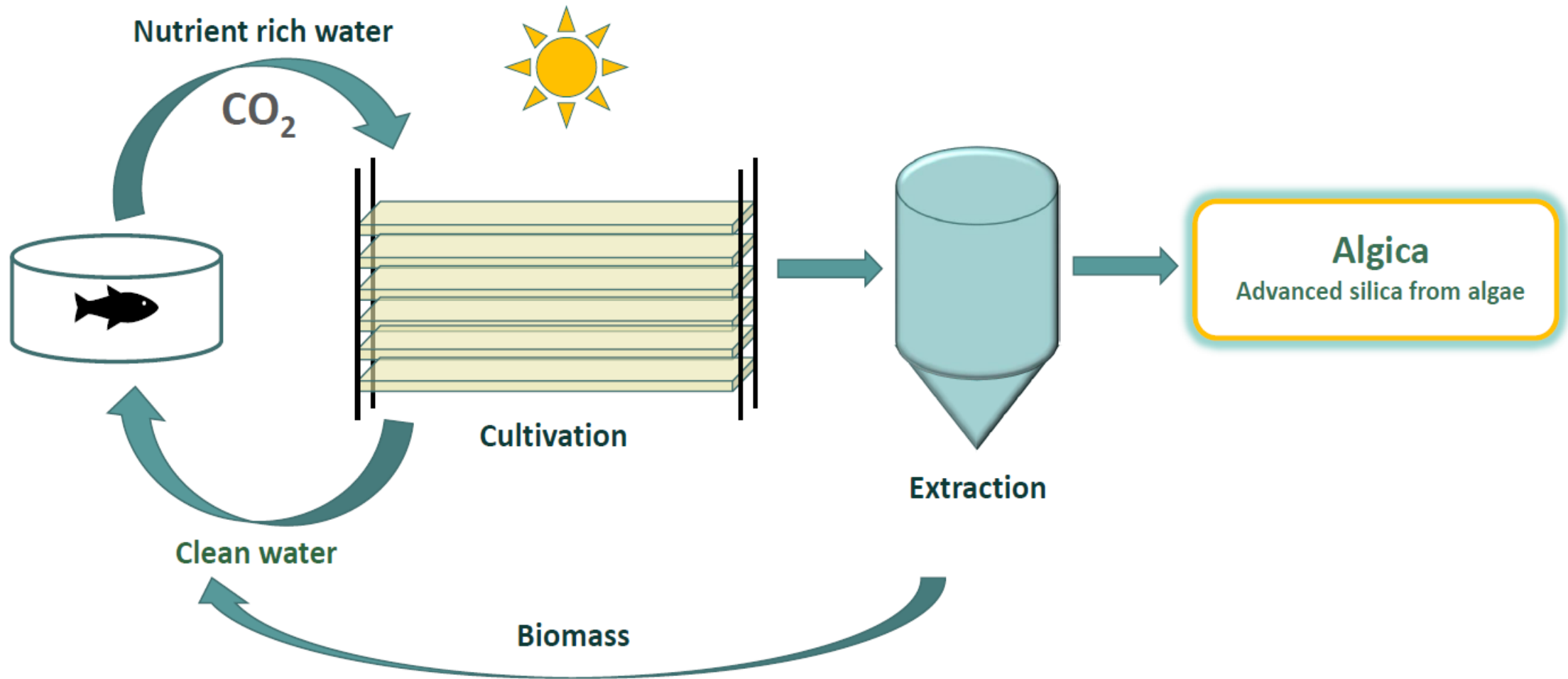
**NTNU**  
Norwegian University of  
Science and Technology

Paper published in

**nature**

SCIENTIFIC  
REPORTS

# CIRCULAR = SUSTAINABLE & PROFITABLE



SWEDISH  
ALGAE  
FACTORY



Photo courtesy of NyTeknik



# IN ACTION ON THE SWEDISH WEST COAST



**We clean water from this salmon farm. Our algae can grow in water from many other sources too.**



**Our algae grows in trays**



Patent pending on cultivation process,  
efficiency enhancement of solar panels and UV absorption



# GREAT TEAM WITH 100+ YEARS' EXPERIENCE IN ALGAE RESEARCH, CHEMISTRY & ENGINEERING



**Gustav**

**Sofie**

**Angela**

**Harriet**

**Micke**

**Justin**

**CEO & Founder: Sofie**

Award-winning entrepreneur and biotechnology engineer with an MSc in business development from Chalmers.

**RnD & Founder: Angela**

Award-winning and Nature-published professor at Gothenburg University. 29 years research in algae, climate and UV radiation.

**Biz Dev: Harriet & Caroline**

Harriet's been 30 years in the chemical industry in sales and product management. Caroline is a tech entrepreneur, Forbes 30u30, Cambridge Uni science grad.

**Tech: Gustav Micke Justin & Sanna**

Algae veterans with large scale algae cultivation background, researchers with experience in algae, biology and process engineering. Published Nature paper with Angela.



