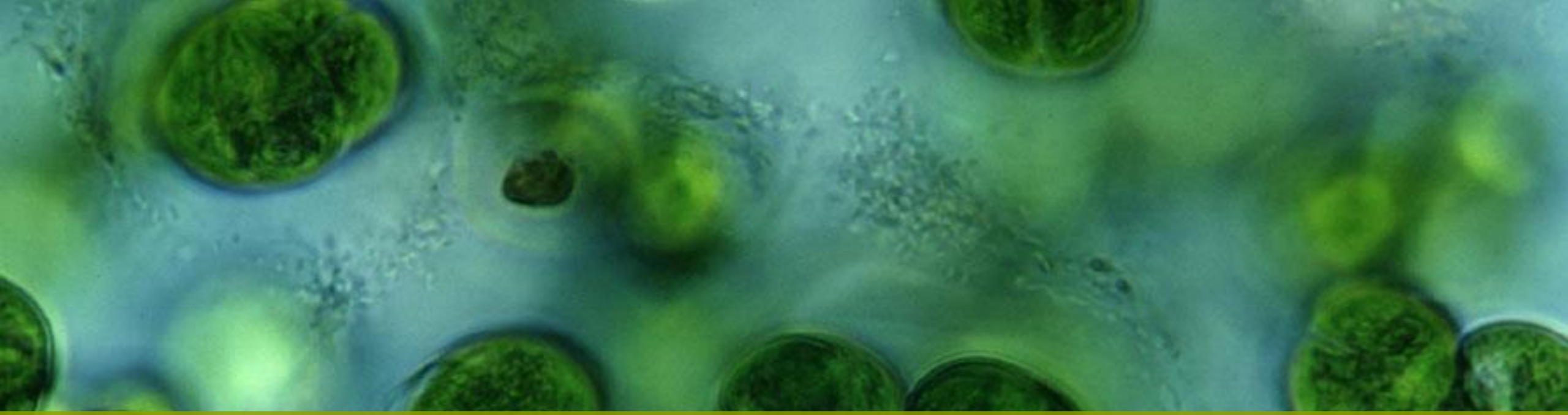
ENHANCE
MICROALGAE

EnhanceMicroAlgae Project

High added-value industrial opportunities for microalgae in the Atlantic Area

Hugo VUILLEMIN – SYNOXIS ALGAE



synoxis algae

Switch from tedious microalgae culture into high cell density and reliable automatised production

Switch from tedious microalgae culture into high cell density and reliable automatised production

WHO ARE WE ?

1981 — synoxis

2003 — Nantes Université, Ifremer

2017 — synoxis algae

Today

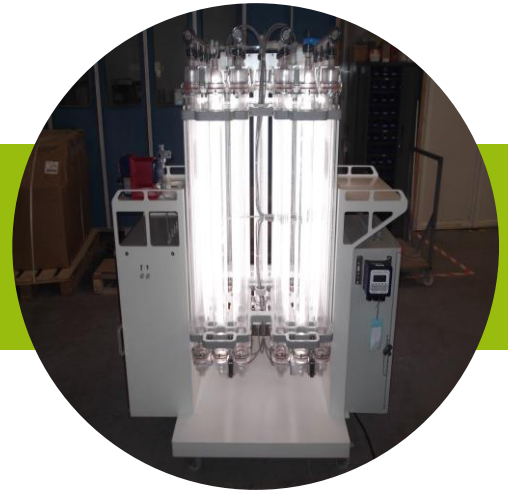
More than 50 installations

Current cultivation methods

Gracieuseté
ISMER - UQAR

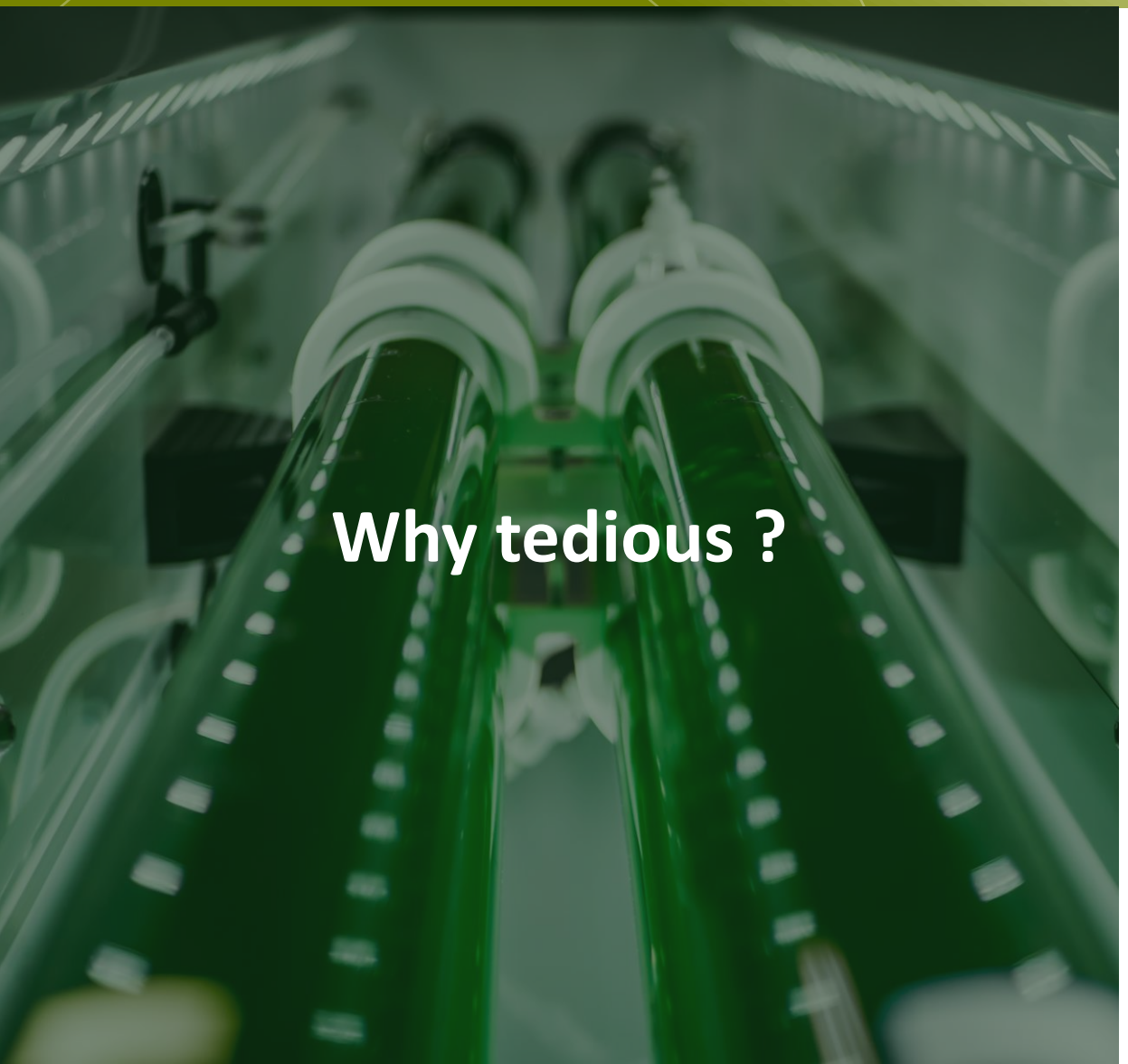
Aziz Regragui
Aquaculture Marine

Jean-Claude MOSCHETTI
GEPEA/AlgoSolis/CNRS Photothèque



IFREMER Nantes

Switch from tedious microalgae culture into high cell density and reliable automatised production



Why tedious ?

Time consuming

Heavy and painful

Difficult cleaning and disinfection

No control of the culture’s parameters

Low productivity

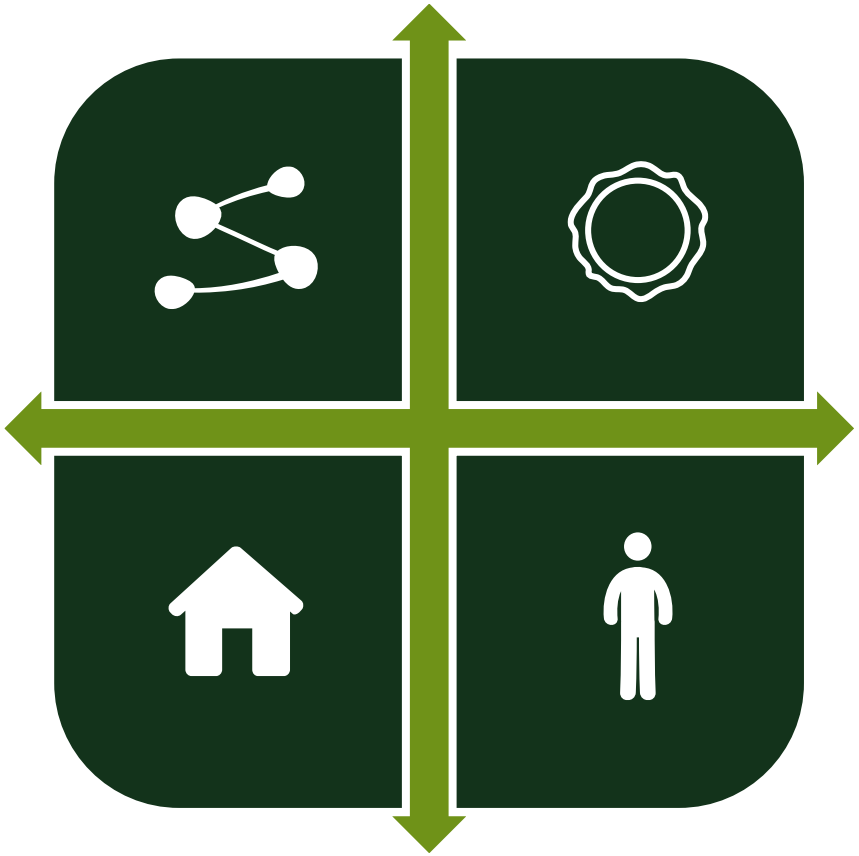
Not suitable for all microalgae

Scale up not always easy

Switch from tedious microalgae culture into high cell density and reliable automatised production

Equipment

Designed, tested and installed by Synoxis algae



Algae

How well do you know this algae ?
Did you cultivate before ?
What are the parameters ?

Environment

How clean is the environment ?
Do you have a lab ?
Good practice policy ?

User

What is your knowledge with algae culture ?
Did you use a PBR before ?

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SALT

Controller

CC

Switch from tedious microalgae culture into high cell density and reliable automatised production

Concentration

10 times superior than with traditional systems

Compatibility

with the most microalgae types with the smooth agitation

Longevity

of the culture for several months in continuous mode

High productivity

thanks to a homogeneous exposure to light and gas

Preservation

and stability of the culture thanks to the closed system

Algae cultivated in our SALT system so far :

Arthrospira platensis, Isochrysis galbana affinis Tahiti, Chlorella, Skeletonema costatum, Chaetoceros, Rhodomonas salina, Chlorella autotrophica, Nannochloropsis gaditana, Cylindrotheca closterium, Odontella aurita, Nostoc, Phaeodactylum tricornutum, Porphyridium, Haematococcus pluvialis...

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SALT

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Light

pH

Temperature

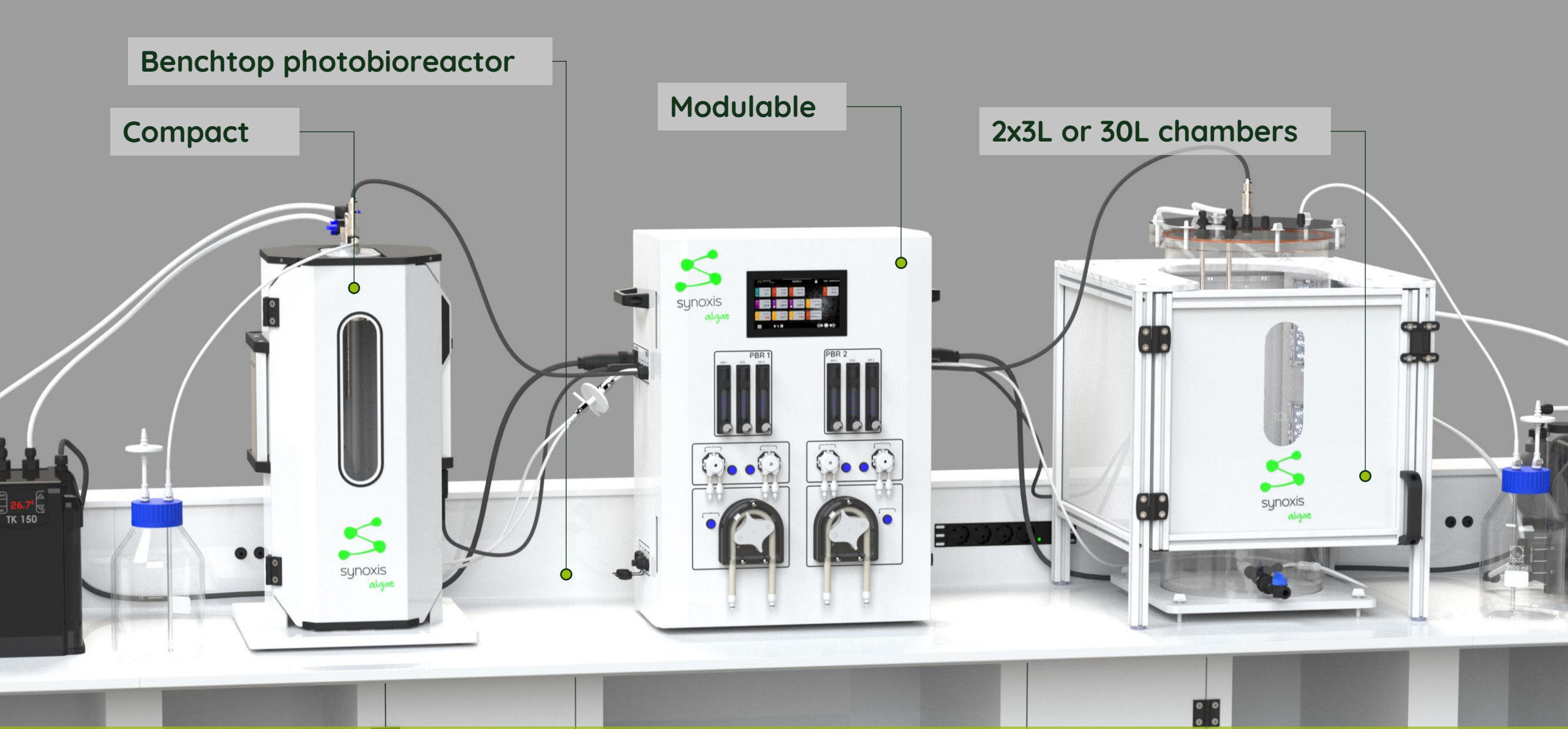
Inputs and outputs

Agitation

Pressure security

Remote access

Data and alerts



NANO

Plug and Experience

16L chambers

Compact

Small production
Innoculation

Mobile

LUCY

Plug and Play

JUMBO

Plug and Produce

Switch from tedious microalgae culture into high cell density and reliable automatised production

360° support approach

- Audit and tests
- Training
- Hotline
- Biological and technological support

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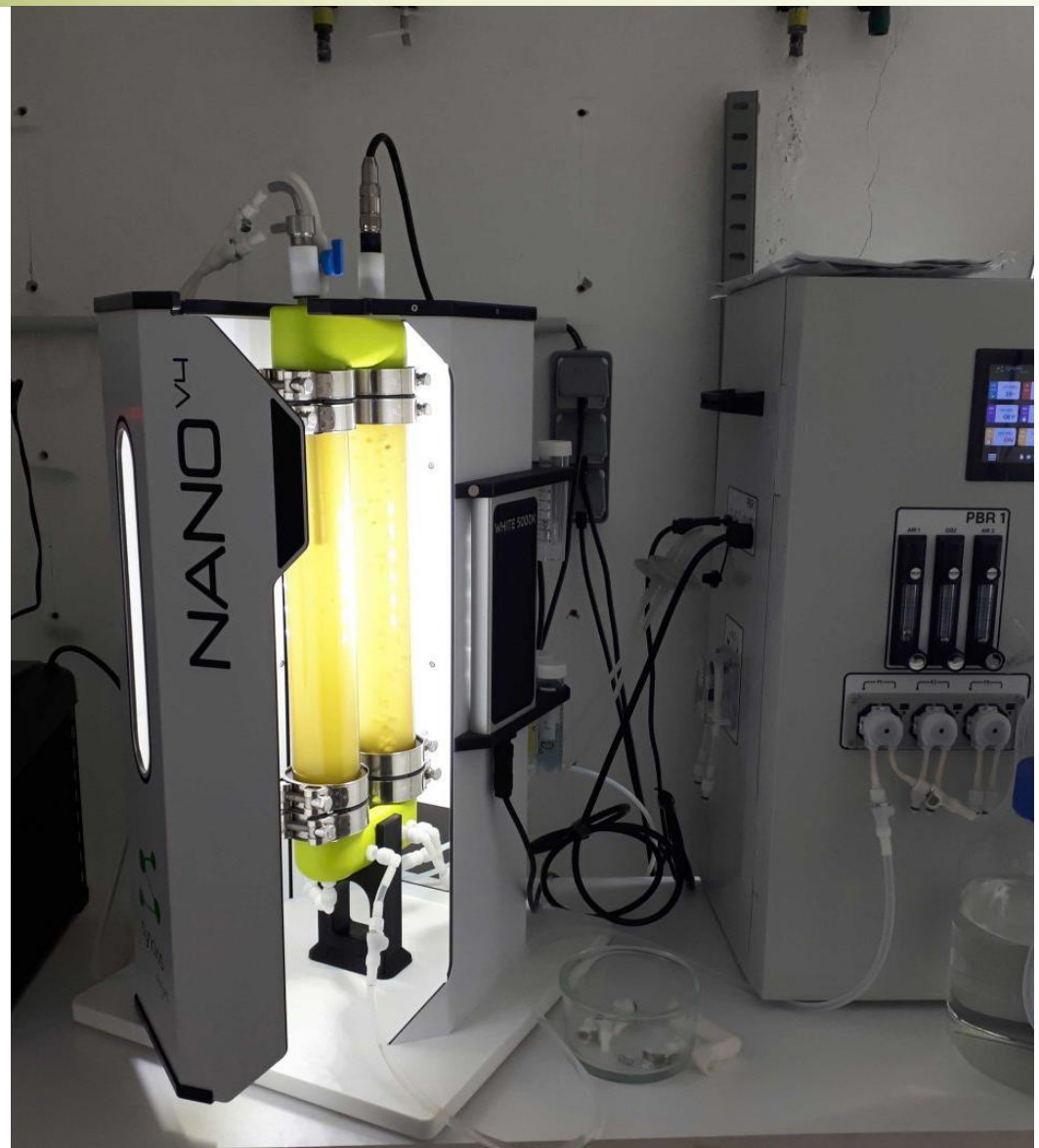

Thank you!

synoxis algae

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European Regional Development Fund
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