



Biochemical engineering R&D internship: Fucoxanthin

Starting June/July 2022 for a period of 3-5 months

Location: preferably the Netherlands, our offices are in Amsterdam and Lüderitz, Namibia. Can be remote.

ROLE OVERVIEW:

Are you interested in designing novel extraction methods and processes for one of the most promising sustainable input materials in the world?

Then we have the perfect internship for you.

We are looking for a biochemical engineering intern who is eager to learn, is positive and scientifically focused to help us uncover the miraculous ingredients present in kelp (a seaweed). Kelp is an amazing organism full of compounds that could transform industries and bring a sustainable, nature positive solution to the world.

At Kelp Blue, we grow seaweed and use all of the biomass to extract multiple compounds using a biorefinery model. We have developed our first product, a biostimulant, an organic liquid extract for the agricultural industry. Now we also need to understand how we can valorise the pulp that remains. There's an ingredient in the pulp, fucoxanthin, that's extremely valuable and there's not much knowledge at the moment on how to extract it in a green and environmentally friendly manner.

This project focusses specifically on the (theoretical) extraction of fucoxanthin, and how to combine this extraction in our biorefinery model next to the other products.

WHAT YOU WILL DO

- Perform a literature review on fucoxanthin (bioactive properties, main resources, critical specifications etc...)
- Compare different extraction methods (existing vs innovative and green)
- Integrate the most promising extraction method in our biorefinery model
- Perform a techno-economic evaluation
- Create a roadmap towards the validation of the proposed design

WHAT'S IN IT FOR YOU?

For starters, the satisfaction of finishing your workday knowing that you are pushing the world into the right direction.

Second, you would be joining a highly collaborative, flexible and international team. Our floor is always open for suggestions and opinions on how we can optimize our operations and maximize our impact on the planet.

Thirdly, you would have enormous room to learn in a start-up environment. We are wildly ambitious group of people who believe in taking charge and solving problems.

ABOUT KELP BLUE

Kelp Blue aims to construct large scale off-shore kelp farms growing *Macrocystis Pyrifera* to drawdown CO₂ from the atmosphere and to boost marine biodiversity. Only the top 20% of the kelp will be harvested to produce different products beneficial for the environment or for our health, replacing or reduce the need for chemical or environmentally polluting products. We do this using a sustainable biorefinery approach, utilizing 100% of the raw material and preventing waste production.

We're not a 'business as usual' company. We're here to make a difference.

We're a lean team, we all roll up our sleeves to get the job done, whatever it may be. People who fit well with us are independent thinkers yet team players and people who are results driven. Because some of the things we're trying to do have never been done before, we're looking for people who have a healthy dose of common sense, who are problem solvers by nature and comfortable getting on with tasks in an unstructured environment.

WANT TO APPLY?

Send an email with a short motivation and your CV to newkelpies@kelp.blue Please use **Biochemical Engineering Internship as the subject line.**