

AquaVIP Gdynia Summer School

AquaVIP project presentation in the frame of blue bioeconomy

17 May 2021

Hanna Łądkowska

Institute of Oceanography, University of Gdańsk, Poland



21958

Students



1767

Academic
staff



11/2

Faculties/
IRA



89

Fields of
study

Agenda

Key facts on Blue Growth
University of Gdańsk
Blue projects and educational programmes
AquaVIP project
Future perspectives

Key facts

The EC Blue Growth agenda for the Baltic Sea Region identifies aquaculture as one of the most promising sectors of the region's maritime economy in terms of growth and job potential.

EU aquaculture is renowned for its high quality, sustainability and consumer protection standards. Still, EU overall output has been more or less constant in volume since 2000 whereas global production, at the same time, has been growing by nearly 7% per year. The current reform of the Common Fisheries Policy aims, inter alia, to develop the full potential of EU aquaculture in line with the Europe 2020 objectives: **sustainability, food security, growth and employment.**

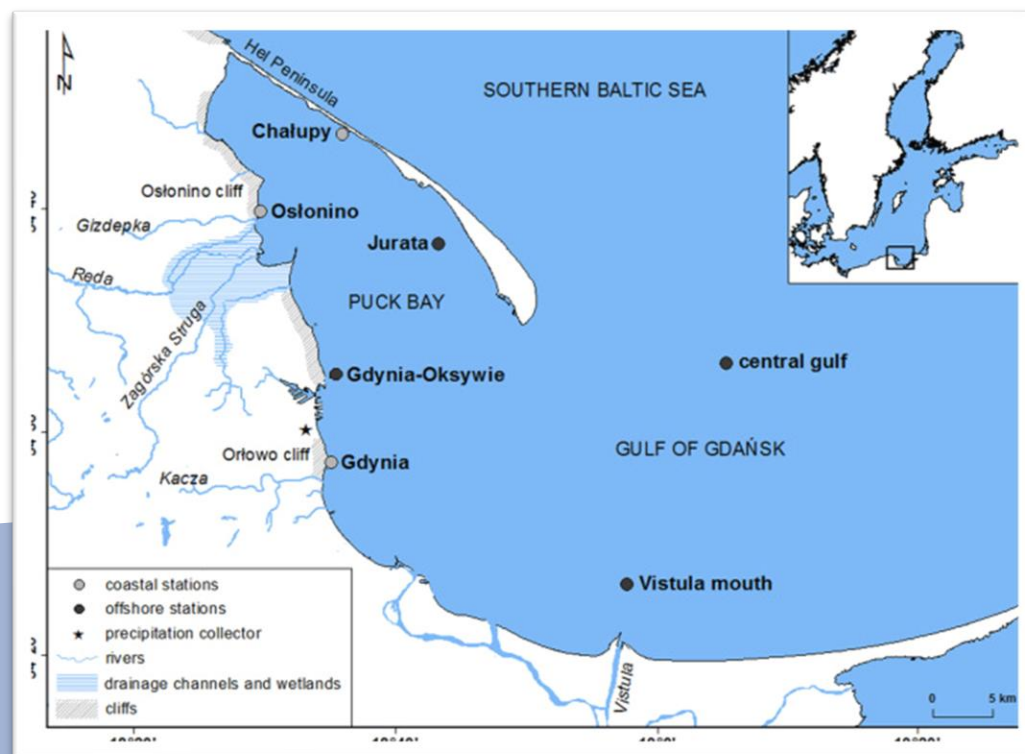


Taking our present efforts in capacity building in aquaculture competence and previous experience with **aquaponics, microalgae cultivation, RAS systems** and building on the projects: **InnoAquaTech, Blue Platform, AquaVIP & BlueBioTECH** we offer dedicated education and training.

Introduction

University of Gdańsk

In mari via tua



Source: <https://www.sciencedirect.com/science/article/abs/pii/S0025326X17302230>



Source: www.ug.edu.pl

Educational programmes

Aquaculture: Business and Technology Bachelor's degree program

University of Gdańsk, Poland



UNIVERSITY OF GDAŃSK

The goal of the bachelor's programme is training for careers at companies and science laboratories related to aquaculture, as well as specialized administrative staff taking care of aquaculture business.

During the course students develop **knowledge and practical skills** in biology, physiology of breeding organisms (fish, invertebrates, algae), food processing, aquaculture products, legal aspects of aquaculture, and the basics of business management.

The course is practical, and students acquire their first professional experiences for two 7-week internships in companies related to aquaculture.

Blue projects

InnoAquaTech - Cross-border development and transfer of innovative and sustainable aquaculture technologies in the South Baltic area

Blue Platform - Advancing Blue Bioeconomy Capacities in the Baltic Sea Region

SEA-EU - The European University of the Seas

AquaVIP - Aquaculture virtual career development platform
for the South Baltic region



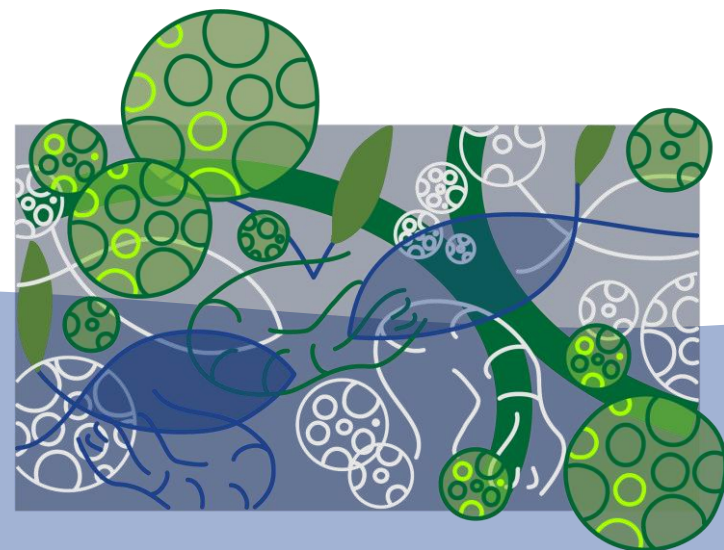
AquaVIP – AQUACULTURE VIRTUAL CAREER DEVELOPMENT PLATFORM FOR THE SOUTH BALTIC REGION

To boost aquaculture labour market within the South Baltic area by fostering human resources capacity through cross-border training and networking.

There is a significant demand for a **high-qualified personnel and knowledge in modern aquaculture**. To develop innovative aquaculture sector and move the focus into the South Baltic region, competencies and knowledge are crucial. This is where AquaVIP has a field for action.

AquaVIP service offer established to reach the objective and boost aquaculture labor market which will result in an increased number of skilled professionals and future employees in the blue economy sector includes:

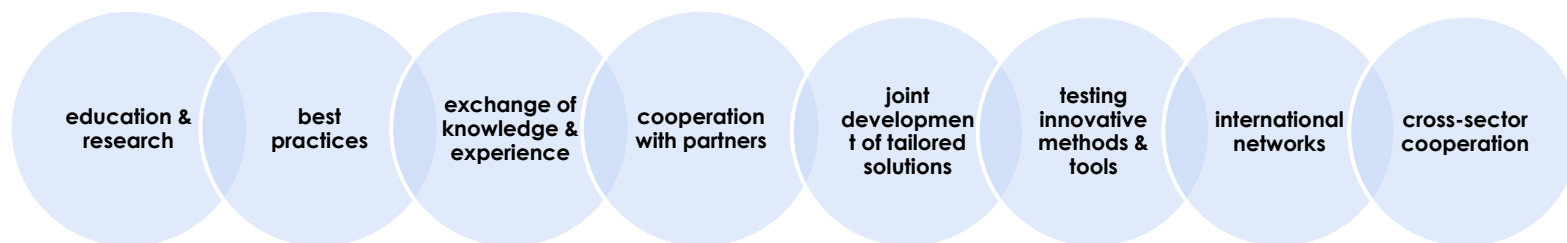
- ✓ AquaVIP **experiments**
- ✓ **AquaYouth** – Aquaculture Youth career development
- ✓ **AquaProfi** – Aquaculture Professionals success support
- ✓ **AquaTION** – Aquaculture innovaTION – boosting education and business capacity



AquaVIP

How do we work?

We put a strong base for strengthening aquaculture programs in the universities, provide hands-on- experience for academic communities and create conditions for changes in the labor market. Actions undertaken in **AquaYouth**, **AquaProfi**, and **AquaTION** on the basis of **AquaVIP experiments** conducted by partner institutions compose our **AquaVIP service offer**.



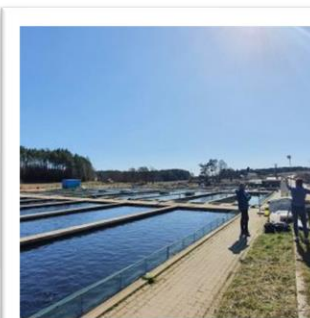
Who do we work for?



AquaVIP service offer

AquaYouth – Aquaculture Youth career development

- summer schools on innovative aquaculture technologies such as recirculating aquaculture systems, aquaponics, integrated systems
- study visits in modern, innovative farms and AquaVIP facilities
- students' panels during branch events
- guide in aquaculture career with jobs catalogue, jobs presentations, films on success stories and farms presentations



Summer schools

AquaVIP Gdynia summer school

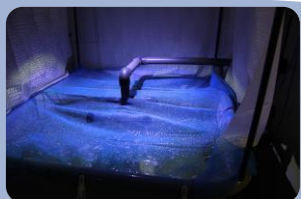
17-20 May 2021

University of Gdańsk, Poland/online

InnoAquaTech Gdynia
summer school
17-19 September 2018
University of Gdańsk, Poland



Aquaculture – promising solutions of technologies
for the South Baltic Region
RAS – shrimps – aquaponics – algae



Summer schools

AquaVIP Klaipeda summer school

28 June – 02 July 2021

Klaipeda University & Klaipeda Science and Technology
Park, Klaipeda, Lithuania/online

AquaVIP Klaipeda SUMMER SCHOOL

Hybrid Event:

Theory / Practical trainings / Virtual tours

28 June – 2 July 2021

SAVE THE DATE & REGISTER!

Learn * Interact * Get Certification

Main topics:

Recirculating aquaculture systems
Aquaponics
Probiotics
Microalgae biomass
Crustaceans
Integrated multi-trophic aquaculture

REGISTRATION: bit.ly/AquaVIPKlaipeda

AquaProfi – Aquaculture Professionals success support

- AquaProfi network of enterprises crucial on the labor market in aquaculture sector in the South Baltic area, fish farmers, SMEs, investors interested in innovative aquaculture solutions
- AquaProfi professional trainings

AquaVIP Master Class

Fall 2021 – to be announced

University of Rostock, Germany

Topic I:
Recirculating Aquaculture Systems

The topic will be presented as online lectures and supporting video material to introduce established/experienced aquaculture staff to Recirculating Aquaculture Systems (RAS) technology.

Next topics will follow

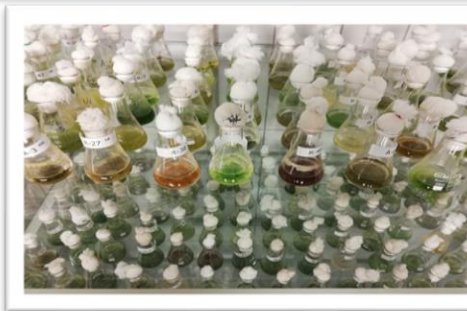
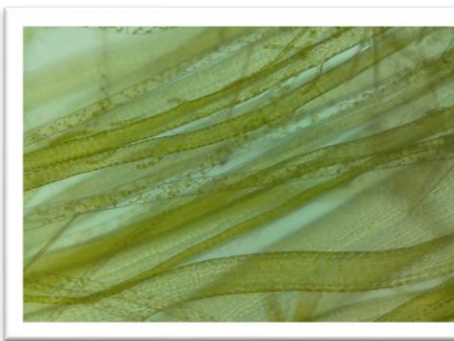
AquaVIP experiments

Experiments in partners' facilities are core activities for the training and networking. Our research activities include:

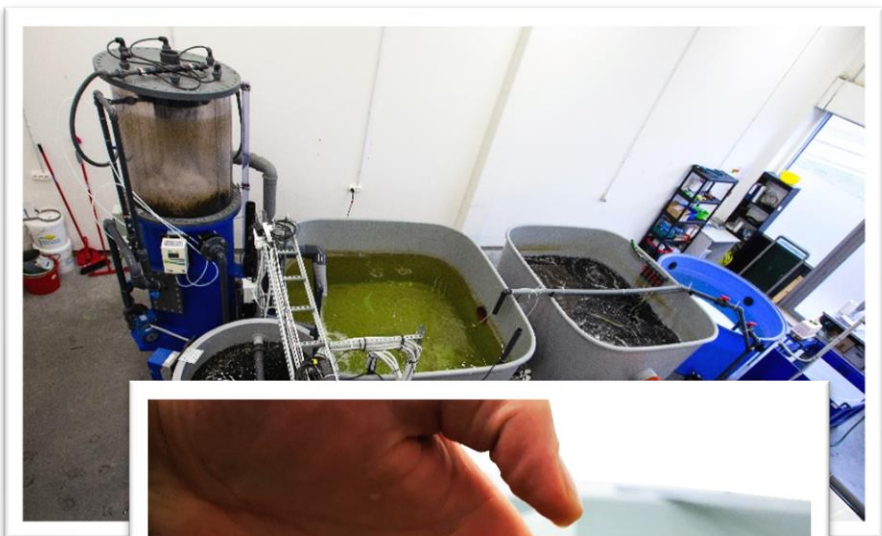
- artificial feed chains • aquaponics • microalgae • *Litopenaeus vannamei* • native Baltic Sea shrimps • RAS systems • technology optimization • shrimp tower RAS concept • brackish salinity in freshwater fish RAS • geothermal brine • *Daphnia* sp. as feed for fish

University of Gdańsk experiments:

- Growth and nutritional value of *Litopenaeus vannamei* from the small-scale laboratory culture (based on previous experiments with InnoAquaTech, first RAS shrimp cultivation in Poland)
- Aquaponic experiment with *Litopenaeus vannamei* and microalgae
- Aquaponic experiment with *Litopenaeus vannamei* and macroalgae
- Nutritional value of native and non-native shrimps from the Baltic Sea and their importance as a food source for humans or in future fish farms



In cooperation with Lithuania



Klaipeda Science and Technology Park

www.kmtp.lt

Klaipeda University

www.ku.lt



KLAIPEDA SCIENCE AND
TECHNOLOGY PARK



Breeding facilities at Klaipeda Science and Technology Park & Klaipeda University

In cooperation with Germany



University of Rostock
www.uni-rostock.de

Fish Glass House, Rostock University

AquaTION – Aquaculture innovaTION – boosting education and business capacity

- e-learning platform
- training in skills related to innovative and sustainable aquaculture, crucial for the future employees in the aquaculture sector of the South Baltic area

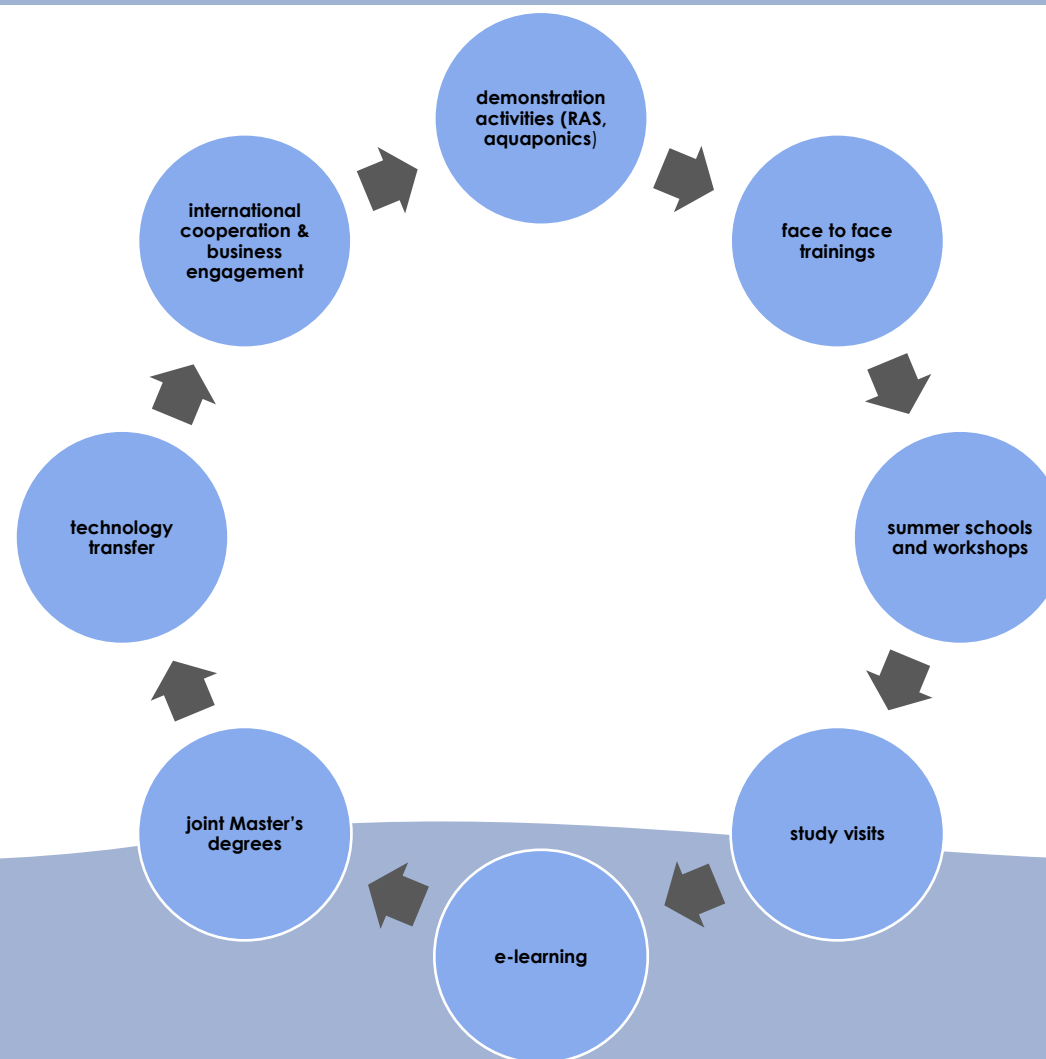
What do we want to achieve?

Innovative aquaculture will bring benefit to businesses in our region and society in general – as it provides healthy, secure and regionally produced high quality food. The use of innovative environmentally friendly production technologies will also open new, international markets, providing further new jobs and **blue-green growth** in the South Baltic area.

Future perspectives

Further education and training activities focused on:

1. Marine species (fish, crustaceans) in Recirculating Aquaculture Systems.
2. Animal – plant productions in aquaponic systems.
3. Algae harvesting and production.
4. Life Cycle Assessment, carbon and water footprints.
5. Circular economy.



Contract No.: STHB.0401.00-LT-0145/18-00

Project budget: 1,053,108.00 EUR

ERDF co-financing: 895,141.80 EUR

Project duration: 01 Jan 2020 – 31 Dec 2022

Lead Partner: Klaipeda Science and Technology Park, Lithuania
www.kmtp.lt

Partners:

Rostock University, Germany, www.uni-rostock.de

University of Gdańsk, Poland, www.ug.edu.pl

Klaipeda University, Lithuania, www.ku.lt

Associated Partners:



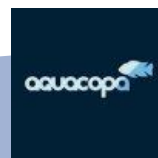
KLAIPEDA SCIENCE AND
TECHNOLOGY PARK



aquavip.edu.pl



VÆKSTCENTER
GULDBORGSUND



BISER | Baltic Institute
For Regional Affairs



Thank you for your attention !

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ug.edu.pl

aquavip.edu.pl

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TECHNOLOGIJŲ PARKAS

