



The EU Aquaponics Hub is a four year networking Action that unites a heterogeneous group of scientists, researchers and SMEs from across the EU and around the globe to better understand the state of knowledge in aquaponics in Europe and around the world and to facilitate innovation and education in this field of sustainable fish and vegetal food production.

COST FA1305 Training School 7

Aquaponics: Ergonomics and economics

30 October – 2 November 2017
AquaBioTech, Mosta, Malta

Background

AquaBioTech is a leading aquaculture research, development and consultancy company in Europe, with its own land based recirculation aquaculture system (RAS) and marine test sites in Malta. The company also designs and installs commercial scale and research specific RAS units in numerous countries. The 40 staff members of the company are experts in various aquaculture topics like system design, nutrition, production technologies, fish health and aquaculture economics and marketing.

This four-day training school will cover the design of RAS and hydroponic greenhouse ergonomics and economics. Ergonomics covers the best possible layout and setup of different parts of both systems with maximum functionality and productivity in mind. The integration of aquaponics to existing aquaculture facilities will cover the basic design considerations needed when adapting an existing aquaculture system to facilitate plant production. An overview will be provided of the economics of various aquaculture systems at different scales, and the necessary considerations when preparing business plans and designs. Besides attending lectures, participants will have the chance to see ergonomics in action in the various RAS units of the company. They will also visit one of the hydroponics farms in Malta where we will have an open discussion about farm design and try to implement the training on site by analysing the existing layout and trying to improve it.

The Trainers

Aquaponics

Matej Leskovec – Aquaponics Research and Consulting, AquaBioTech, Malta

Hydroponics: ergonomics and economics

Malcom Borg – Deputy Director, MCAST- Centre for Agriculture, Aquatics & Animal Sciences, Malta

Dr. István Szűcs- Professor on Agriculture Economics, University of Debrecen, Hungary

Marilyn Brentlinger – Chief Operations Officer , CropKing Inc, USA

RAS ergonomics and economics

George Mantas – Business Development Director, AquaBioTech, Malta

Kyra Hoevenaars – Senior Aquaculture Consultant, AquaBioTech, Malta

Programme

Sunday 29 October

Trainees arrive

Monday 30 October

- 09:00-13:00
- Welcome
 - Introduction of trainees and trainers
 - Course contents
 - The EU Aquaponics Hub COST Network
 - Introduction to aquaponics

13:00-14:00 Lunch

- 14:00-18:00
- Tour of AquaBioTech facilities
 - Aquaculture: RAS technology
 - Integration of aquaponics in aquaculture

19 :00 Dinner

Tuesday 31 October

- 09:00-13:00
- RAS ergonomics
 - Workshop: RAS ergonomics design exercise
 - VicInAqua Project Information session: Integrated aquaculture based on sustainable water recirculation system for the Lake Victoria Basin

13:00-14:00 Lunch

- 14:00-18:00
- Hydroponics greenhouse ergonomics
 - Workshop: Hydroponic greenhouse ergonomics design exercise

19:00 Dinner

Wednesday 1 November

- 09:00-13:00
- Tour of a hydroponics farm
 - Introduction to the use of greenhouses in Malta by Malcolm Borg
 - Discussion on farm design

13:00-14:00 Lunch

- 14:00-18:00
- Business concept of a commercial scale aquaponic system based on an Hungarian case study
 - Marketing and business development

19:00 Dinner

Thursday 2 November

- 09:00-13:00
- Hydroponic greenhouse business planning
 - Workshop: Aquaponics business planning

13:00-14:00 Lunch

- 14:00-18:00
- Discussion and conclusion
 - Evaluation of the training school

19:00 Dinner

Friday 3 November

Trainees depart

Eligibility

Applicants must be resident in a COST country: Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Latvia, Lithuania, Luxembourg, Malta, The Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, United Kingdom and the former Yugoslav Republic of Macedonia. The nationality of the applicant is not a bar to eligibility. Preference will be given to postgraduate students and postdoctoral researchers. Students from different research backgrounds (agriculture, horticulture, aquaculture, sanitary engineering ...) who are interested to move into aquaponics are welcome to apply.

Financial support

COST Action FA1305 is offering **14 places** on the training school on a competitive basis. Successful applicants will be offered a maximum grant of € 1200 as a contribution towards the costs of travel, accommodation and meals. The exact award offered will depend on the cost of travel as this differs considerably across eligible countries. **Please note that the grant will be paid by bank-to-bank transfer after the course has been completed.**

Logistics

Trainees will be responsible for making their own travel arrangements, and for providing adequate insurance cover (personal, travel and medical) for the whole duration of the training course and travel period.

AquaBioTech has reserved accommodation at a cost of EUR 45 per night for 5 nights (arriving October 29 and departing on November 3). **Trainees must pay for their accommodation before September 1,** and for their dinners during the training school. These costs will be reimbursed as part of the financial support package.

How to apply

Send a motivational letter stating your reasons for wanting to partake in this Training School to Kyra Hoevenaars (kyh@aquabt.com), Sarah Milliken (s.milliken@greenwich.ac.uk) and Benz Kotzen (b.kotzen@gre.ac.uk) **by 31 July 2017**. The letter should be accompanied by a 1-2 page CV which should include your personal details, education background, current university address (if applicable), training/work experience, publications (if applicable), email address and Skype name.