



ALGAL BIOTECHNOLOGY – TECHNIQUES AND OPPORTUNITIES FOR THE SUSTAINABLE BIOECONOMY

All times are in Greenwich Mean Time (GMT). Please note that UK and Iceland use the same GMT and countries observing Central European Time (CET) are 1 hour behind (so 9am in UK/Iceland is 10am in Germany). Please note that times might vary on the day if technical issues arise.

Day 0 (WEDNESDAY 18TH November 2020)

19:30 to 21:00: Evening networking and introduction breakout rooms (optional)

DAY 1 (THURSDAY 19th November 2020):

MORNING – WHAT ARE ALGAE AND WHY WOULD YOU EAT IT? (Chair: Dr Matthew Davey)

09:30 – 09:45: Welcome by Dr. Matthew Davey (Department of Plant Sciences, University of Cambridge and SAMS, UK) (explain format, polls, quizzes, lunch and site “word” quiz)

09:45 – 10:10: What are algae? Introduction to algal biology and diversity – microalgae (Dr Anne Jungblut, Natural History Museum, London, UK)

10:10 – 10:35: What are seaweed and what are they used for? (Prof. Michele Stanley, SAMS, UK)

10:35 – 10:50: Coffee break, walk around

10:50 – 11:40 (SITE VISIT 1): Tour of the international CCAP algal collection facility and questions (Christine Campbell, Cecilia Rad Menéndez, Dr Matt Davey <https://www.ccap.ac.uk>)

11:40 – 12:00: quiz and poll about algal food ingredients – what people know, think as ingredients <https://www.sli.do/>

12:00 – 13:00: lunch break

AFTERNOON – NUTRIENTS IN ALGAE - HOW TO EXTRACT AND ANALYSE THEM (13:00 start) (Chair: Dr Ulrike Schmid-Staiger)

13:00 – 13:25: Novel cell disruption technique for ingredients recovery (Dr Ana Lucía Vásquez-Caicedo, Fraunhofer, Germany)

13:25 – 13:50: Genetic engineering approaches for algal biotechnology (Dr Payam Mehrshahi, University of Cambridge, UK)

13:50 – 14:00: very short quiz – have you been listening?!?

14:00 - 14:35 (SITE VISIT 2): AlgaeCytes – A Sustainable Process for EPA Production (John MacDonald, Algaecytes, UK <https://algaecytes.com/>)

14:35 – 14:55: tea break and walk around

15:00 – 15:35: Algenuity – Go Faster and Work Smarter. (Dr Andrew Spicer, Algenuity, UK <https://www.algenuity.com/>)

15:30 - 15:55: Living Ink, algal pigments for the printing industry (Dr Scott Fulbright, Living Ink, USA <https://livingink.co/>)

15:55 - 16:50: Breakout room sessions –rooms with delegates and speakers talking about algal biotechnology

16:50 – 17:00: Poll/Survey for first day, results of quiz. Close and wrap up chat

17:00 – 18:00: optional break out groups in zoom “café-bar” and network “drinks”

DAY 2 (FRIDAY 20th November 2020):

MORNING – ALGAL SCALE UP IN ACADEMIC SETTINGS (9-30am start) (Chair: Dr Ana Lucía Vásquez-Caicedo):

09:30 – 09:40: Welcome by Dr. Matthew Davey (Department of Plant Sciences, University of Cambridge and SAMS, UK)

09:40 – 10:35 (LIVE SITE VISIT 3): Algal Innovation Centre – University of Cambridge (10l to 150l bioreactors and harvesting) (Dr Payam Mehrshahi and Dr Lorraine Archer): <https://www.cambplants.group.cam.ac.uk/cambridge-bioenergy-initiative/AIC>

10:35 – 10:40: very short quiz – have you been listening?!?

10:40 - 11:00: coffee break and walk around (or break-out room to Payam/Lorraine at Cambridge)

11:00 – 11:25: Up- and downstream processing of microalgae (Dr. Ulrike Schmid-Staiger, Fraunhofer, Germany)

11:25 – 12:15: (LIVE SITE VISIT 4): Scale up facilities/bioreactors tours at Fraunhofer – (Dr. Ulrike Schmid-Staiger and Dr Ana Lucía Vásquez-Caicedo)

12:15 – 12:20: very short quiz – have you been listening?!?

12:20 – 13:15: lunch (optional break out rooms) option to watch **The EIT Food Future Kitchen Virtual Reality Video Series**

AFTERNOON – ALGAL SCALE UP IN INDUSTRY (Chair: Dr Rene Groben)

13:15 – 13:40: ThermoBlue – A novel blue food colorant from thermophilic microalgae (Dr René Groben, Matís, Iceland)

13:40 – 14:25 (SITE VISIT 5): Astaxanthin and its Production the Algalif way (Ingólfur Bragi Gunnarsson, Algalif, Iceland <https://algalif.com>)

14:25 – 14:35: very short quiz– have you been listening?!?

14:35 – 15:00: tea break and walk around (or breakout room)

15:00 – 15:25: Fermented seaweed based novel feed additives for aquaculture (Elísabet Eik Guðmundsdóttir, Matís, Iceland)

15:25 – 16:10 (SITE VISIT 6): Vaxa, Iceland (Isaac Berzin, Vaxa, Iceland, <https://www.vaxa.life>)

16:10 – 16:15: very short quiz – have you been listening?!?

16:15 – 16:30: Poll/Survey for second day, results of quiz. People can also share their cooking skills and drawings etc. Close and wrap up chat.

16:30 – 17:30: optional break out groups in zoom “café-bar” and network “drinks”