BioCity Turku Research Programme 2022-2026

www.smartbio.fi

SmartBIO

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Chair: Yagut Allahverdiyeva-Rinne (UTU)
Co-chair: Henrik Grenman (ÅAU)

BioCity Turku coordinator: Maija Lespinasse
NordAqua NCoE project manager: Sema Sirin

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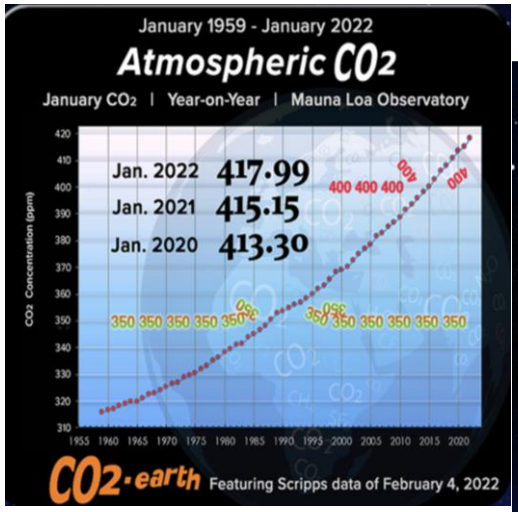
Global Challenges: climate change, food security

Earth's CO_2 level passes a new climate milestone



https://www.co2.earth/daily-co2

We need to produce more food in the next 35 years than we have ever produced in human history, given the projected increases in world population

SmartBio aims to accelerate innovation on nature-inspired emerging technologies and sustainable circular bioeconomy strategies to support the transition toward fossil-free society

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DEPARTMENT OF LIFE TECHNOLOGIES
Molecular Plant Biology:
Prof. Yagut Allahverdiyeva
Prof. Eevi Rintamäki
Prof. Paula Mulo
Assistant Prof. Pauli Kallio
Senior lecturer Taina Tyystjärvi
Lecturer Esa Tyystjärvi
Prof. Eva-Mari Aro
Food Chemistry and Food Development:
Prof. Kati Hanhineva

DEPARTMENT OF CHEMISTRY:
Prof. Juha-Pekka Salminen
Prof. Carita Kvarnström

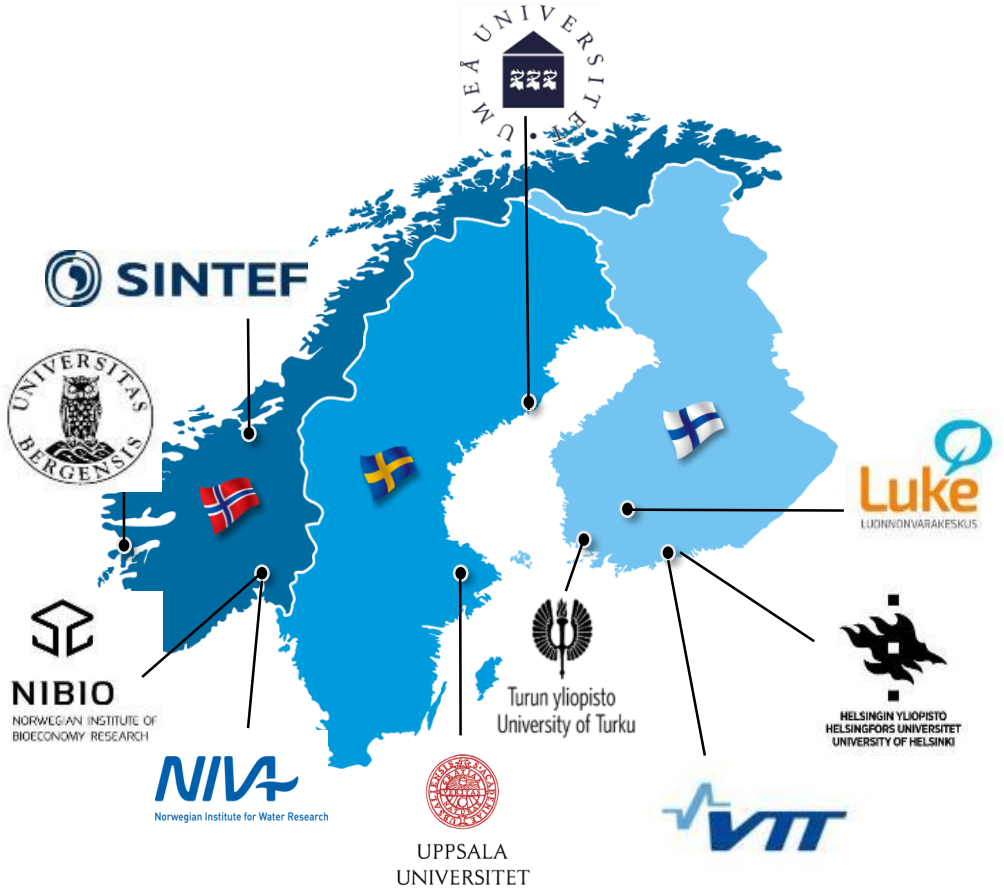
DEPARTMENT OF MECHANICAL AND MATERIALS ENGINEERING:
Assistant Prof. Milica Todorovic

Associated partner:
Turku Science Park Ltd (PhD Linda Fröberg-Niemi)

TSP is a non-profit development company for the Turku subregion that works in close cooperation with local, national and international actors in the fields of biotech, cleantech, circular (bio)economy.

Nordic Centre of Excellence (2017-2022) in NordForsk Bioeconomy Programme

NordAqua develops algae – based sustainable **photosynthetic production platform**



NordAqua is a consortium of 10 Nordic universities and several industrial and societal partners

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NordForsk

SUNERGY Community and Eco-System for Accelerating the Development of Solar Fuels and Chemicals

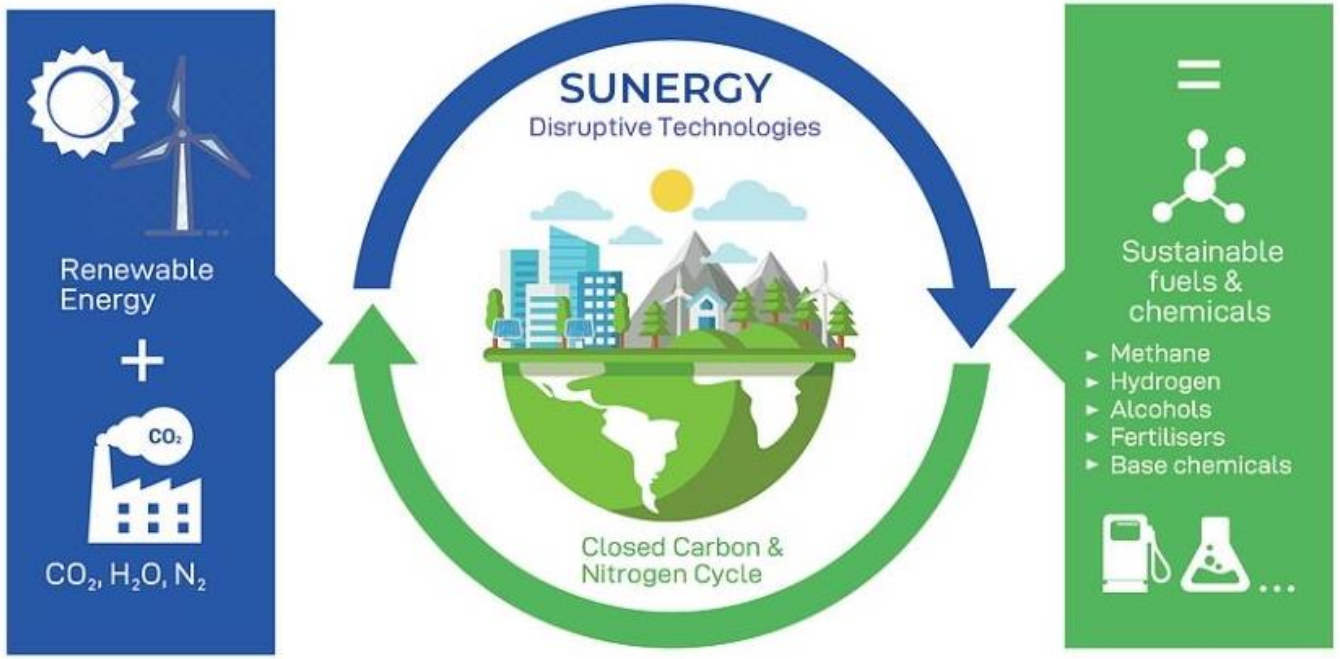
SUNER-C EU Coordination and Support Action (2022-2025)

European Commission

https://www.sunergy-initiative.eu

Suner-C Vision for a Fossil-free Future

To enable a circular economy through the sustainable production of fossil-free fuels and base chemicals from renewable energy and simple feedstock molecules (water, CO_2 and N_2).



- 31 participants from 12 EU countries:
  - 13 academic partners
  - 12 industrial partners
  - 4 national & European networks
  - 1 NGO

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- **Develop a multidisciplinary hub** by connecting researchers currently working in differing technological fields at UTU and ÅAU.
- **Stimulate a close collaboration** within the current **local infrastructures** and **establish joint infrastructure**(s) focusing on nature-inspired technologies. **A joint UTU/ÅAU PhotosynTec FIRI infrastructure application is pending** and aims to upgrade and establish a new platform serving the photosynthesis and biorefinery approach.
- Support the **interdisciplinary collaboration on the researcher and doctoral student level,** which has been built up during the past years: **seed research grant**(s) to stimulate joint research project(s).
- Organize **joint events and seminars:** PhD student events, annual meetings, Aboa Tech Talks
- Provide travel grants for PhD students participating in the program.
- Organize joint activities with other BioCity Turku research programs

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Åbo Akademi University

SCP
SMART CHEMISTRY PARK

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Towards Sustainable Bioeconomy

SmartBio / NordAqua Student symposium (2018, 2019, 2021) - about 30 participants

Joint UTU/ ÅAU course – KABI4044-3001Towards Bio-based Finland (3 ECT)

SmartBIO Young Researcher Symposium 2021

18.11.2021 08:30 - 22:00

Herrankukkaro, Naantali, Finland

Welcome on-board to our **SmartBIO Young Researcher Symposium 2021** with the theme of **breaking borders and network bridging** within SmartBIO. Take a look at the preliminary program. The final version will be available shortly before the event.

Breaking Borders with SmartBIO – Student Symposium

12.06.2019

Welcome to the SmartBIO Student Symposium 2019!

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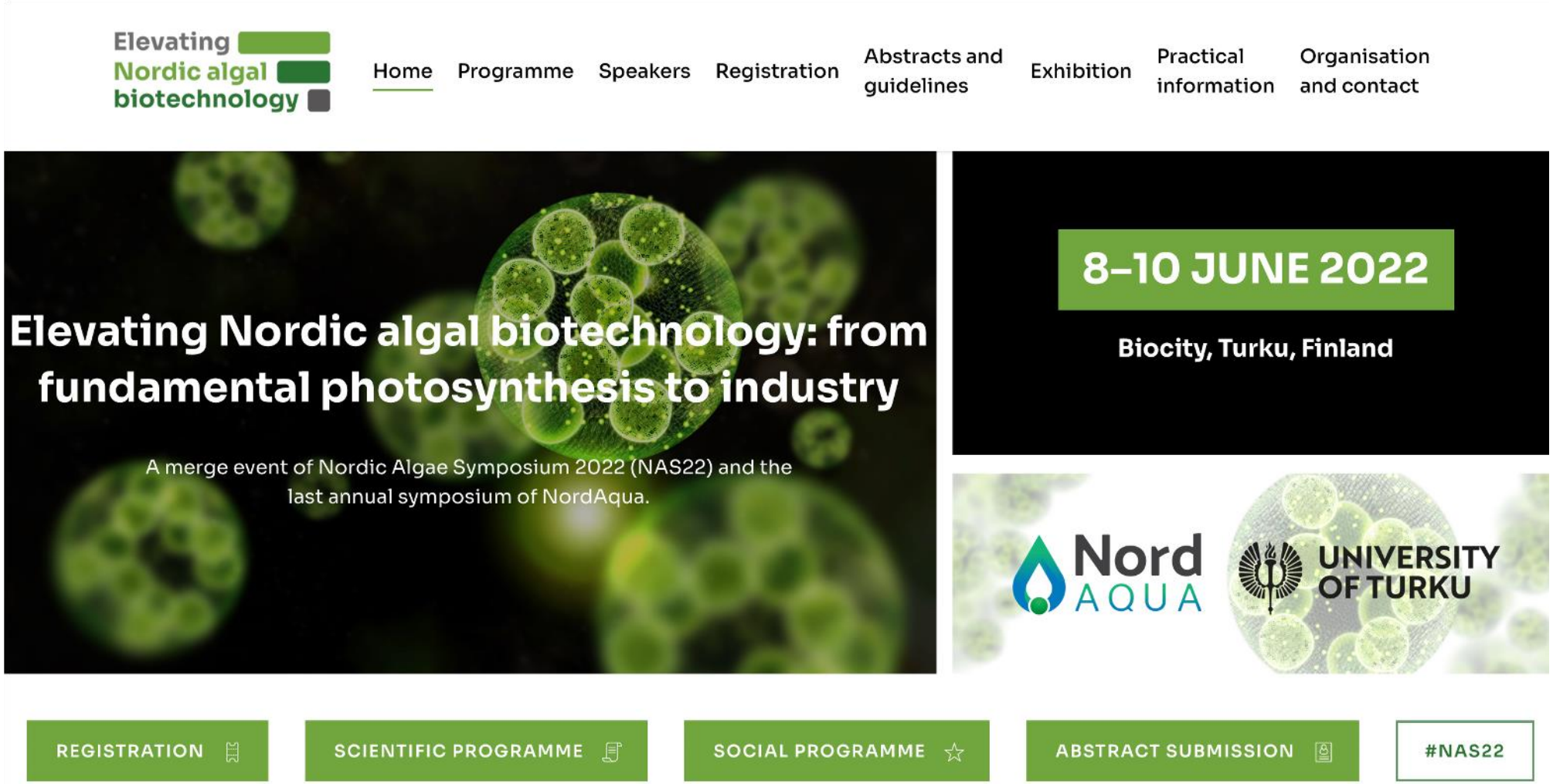
Åbo Akademi University

SCP SMART CHEMISTRY PARK



> 110 participants, 15 country