

SNAP

Seaweeds for Novel Applications and Products

About the project

Future bio economy requires marine products to meet increased needs for food, feed, materials and products. Seaweed is an underutilized resource in Europe with a great potential to be part of the solution for a future blue-bio economy with increased value creation and industry development. The SNAP-project is product and innovation focused, where the aim is to develop novel products and applications by upgrading and modification of five different polysaccharides from selected brown and red algae. To obtain this, a consortium consisting of 2 companies, 5 universities, and 1 research institute, all with extensive infrastructure, competence and history in seaweed and marine polysaccharide research and innovations, is established. SES is a Norwegian leading seaweed aquaculture and processing company, and DuPont has extensive experience in seaweed utilization and is a major manufacturer of high-quality hydrocolloids from brown and red algae.

Tallinn University (TLU) has expertise in processing, isolation and utilization of valuable compounds from a wide range of seaweeds. The Royal Institute of technology (KTH) has extended expertise in plant and seaweed polysaccharide structural elucidation and development of polysaccharide-based products, especially functional and structural biomaterials and composites. The Norwegian University of Science and Technology (NTNU) and SINTEF have worked on characterization and chemoenzymatic tailoring of seaweed-based polysaccharides for decades and University of Trieste (UNITS) have their expertise in making advanced biomaterials from marine biopolymers. University of Bremen (UB) holds expertise in discovery, characterization and use of biopolymer-modifying enzymes. The project is expected to deliver new key information regarding polysaccharide structure function relationships, highly defined chemoenzymatic functionalized oligomers and polysaccharides and novel "blue" biomaterials targeting selected markets and applications.



Project Overview

CALL 1 | 2019

Project Coordinator:

Mr. Håvard Sletta, SINTEF AS, Biotechnology and Nanomedicine, Trondheim, Norway

Project Partners:

- Prof. Finn Aachmann, NTNU Norwegian University of Science and Technology, Trondheim, Norway
- Prof. Vincent Bulone, Kungliga Tekniska Högskolan, (KTH), School of Engineering Sciences in Chemistry, Stockholm, Sweden
- Dr. Rando Tuvikene, Tallinn University, School of Natural Sciences and Health, Tallinn, Estonia
- Mrs. Maren Sæther, Seaweed Energy Solutions AS, Trondheim Norway
- Mr. Christian Klein Larsen FMC BioPolymer AS, Alginate and Carrageenan R&D, Sandvika, Norway
- Dr. Jan-Hendrik Hehemann, MARUM – Center for Marine Environmental Sciences, University of Bremen, Germany
- Prof. Ivan Donati, University of Trieste, Department of Life Science, Trieste, Italy

Keywords:

Brown algae, red algae, polysaccharides, biomaterials

Priority Area:

Exploring new bioresources

Funding granted:

1.570.500 euros *



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement no. 817992.

* The exact amount of granted funds may change after completion of national contracts.