Press Release

58/2019

Marine Algae as Resources for the Future
German - Danish Interreg Project FucoSan Presents first Results

26. November 2019/Kiel **Which opportunities and challenges do marine algae offer as raw material of the future? This question will be discussed by about 70 experts at a conference held on 26 November at GEOMAR Helmholtz Centre for Ocean Research in Kiel. The event entitled "FucoSan - from Science to Innovation Day 2019" is organised by the project consortium of the joint German-Danish project FucoSan and hosted by GEOMAR Research Unit Marine Natural Product Chemistry / GEOMAR Centre for Marine Biotechnology (GEOMAR-Biotech).**

Today, marine macroalgae (seaweeds) in Europe are not primarily perceived as a natural raw material. The valuable ingredients of many algae are only used to a relatively small extent; whereas in Asia, the health-promoting properties of many algae have been highly valued for a long time. In our marginal seas, the North Sea and the Baltic Sea, algae represent also an important but yet rarely explored and resource. Many algal ingredients have substantial health-promoting properties and use in various technologies. This applies in particular to the so-called fucoidan, which is obtained from brown algae.

"Fucoidan is a large polysaccharide with promising properties for medical and cosmetic applications", explains the project coordinator of FucoSan, Prof. Dr. Alexa Karina Klettner from the University Hospital Schleswig-Holstein (UKSH), Kiel Campus. "However, fucoidan varies in different ways depending on its source, which can lead to different, sometimes even contradictory effects. Especially for medical applications, these effects have to be investigated in detail", Prof. Klettner continues.

With its interdisciplinary approach, the Interreg project FucoSan, in which eight partners from Germany and Denmark are actively involved, generates systematic knowledge about fucoidan polymers and their modes of action in order to pave the way for future applications. The project partners developed processes to obtain brown algae from the Baltic Sea in a sustainable way and investigate the extracted fucoidans. The research results are transferred into a database, which scientists use as basis for selection of promising candidates for further testing. In pilot experiments, the fucoidan extracts are assessed for their applicability in the fields of ophthalmology, regenerative medicine and cosmetics. At the same time, the project partners are investigating various business models for using the generated results beyond the project end. In this way, the expertise within the project will be combined into a sustainable value chain.

At the conference "FucoSan - from Science to Innovation Day 2019", which will take place on 26 November at GEOMAR, current results will be presented and discussed and the event will also provide opportunities for networking and development of further projects. All interested partners from science and industry are welcome. "We are pleased to bring relevant stakeholders from science and industry together at GEOMAR to discuss the results of the FucoSan project and future challenges", says Prof. Dr. Deniz Tasdemir, Head of the Research Unit Marine Natural Product Chemistry and

the GEOMAR Centre for Marine Biotechnology, who hosts the conference and manages GEOMAR's activities in the project. “This meeting is an excellent forum to discuss research results, but also to make new contacts and gain new insights into the commercialization potential of fucoidans in various application areas," concludes Prof. Klettner.

Background information on the FucoSan project:
German project partners:

- Kiel University (CAU)
- University Hospital Schleswig-Holstein (UKSH)
- Coastal Research & Management oHG (CRM)
- OceanBasis GmbH
- GEOMAR Helmholtz Centre for Ocean Research Kiel

Danish project partners:

- Technical University of Denmark (DTU)
- Southern Denmark University (SDU)
- Odense Universitets Hospital (OUH)

Duration: 1 February 2017 - 31 August 2020

Budget: EUR 3.8 million, of which EUR 2.2 million in grants and subsidies

FucoSan is supported by Interreg Germany-Denmark with funds from the European Regional Development Fund.

Links:
https://www.fucosan.eu Project page FucoSan

Images:
At www.geomar.de/n6786 images are available for download.

Contact:
Dr. Andreas Villwock (GEOMAR, Communication and Media), Phone: +49 0431 600-2802, presse@geomar.de