

# BIO PLASTICS EUROPE

Scientific Colloquium

## Biobased Plastics: Exploring Perspectives, Risks, and Solutions



Bremerhaven, 20-21 September 2023

## AGENDA



Hochschule für Angewandte  
Wissenschaften Hamburg  
Hamburg University of Applied Sciences



ALFRED-WEGENER-INSTITUT  
HELMHOLTZ-ZENTRUM FÜR POLAR-  
UND MEERESFORSCHUNG



Horizon 2020

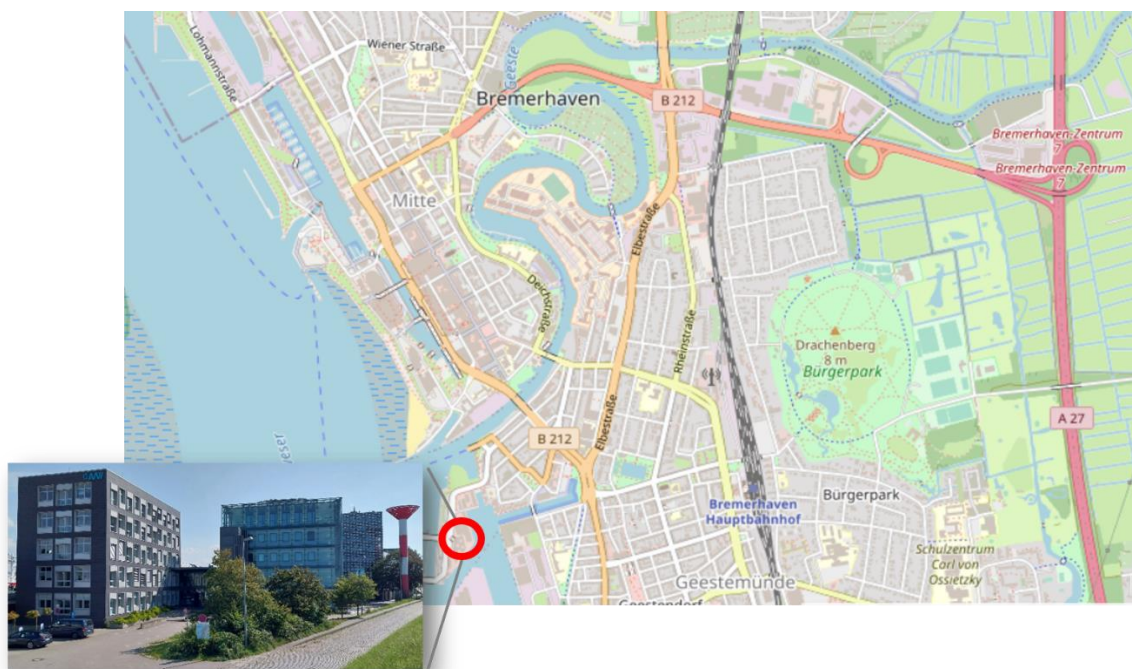
This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 860407

## Venue

For decades, the cityscape of Bremerhaven was shaped by shipbuilding, harbors and fishing. Meanwhile, Bremerhaven has become an important science location for environmental technology and marine research. Our technical university is almost 50 years old, and offers around 3,000 Students a wide range of opportunities in the areas of energy and marine technology as well as life science. Marine research has been established in Bremerhaven since the 1920s, formerly by the Bremerhaven Institute for Marine Research and since 1980 by the Alfred Wegener Institute Helmholtz Center for Polar and Marine Research (AWI). The Lower Weser region around Bremen and Bremerhaven has grown to the probably largest agglomeration of marine research institutions in Europe.

The General Assembly (GA) and the Bioplastics Europe (BPE) Scientific Symposium will take place in the Buildings of the AWI-Campus in Bremerhaven.

The address is “Am Handelshafen 12”.



Detailed information about the location and travel routes is available at our web page:

<https://www.awi.de/en/about-us/sites/bremerhaven.html>

For any questions and support, do not hesitate to contact us:

c/o Reinhard Saborowski  
Reinhard [Saborowski@awi.de](mailto:Saborowski@awi.de)  
+49 (0)471-4931-2220

## AGENDA

### Wednesday, 20 Sept 2023

08:30		Registration and poster placement
09:15		Opening and welcome notes
09:30	Talk 1	<b>Jelena Barbir</b> (HAW) Keynote: Developing and implementing sustainability based solutions for bio-based plastic production and use to preserve land and sea environmental quality in Europe (BIO-PLASTICS EUROPE)
10:00		<b>Session 1:</b> The plastic burden - action needed Chair: Angela Hahn (PI)
10:00	Talk 2	<b>Lars Gutow</b> (AWI) Global ocean plastic pollution – can bioplastics do better?
10:20	Talk 3	<b>Andrea Stolte</b> (WWF) Lost fishing gear as a threat to marine life – how biodegradable fibres could help.
10:40	Talk 4	<b>Franz Stelzer</b> (acib GmbH & TU Graz ICTM) Biopolyesters / poly(hydroxyalkanoates) - natural polymers as solvers of the “Global Plastic & CO <sub>2</sub> Problem”?
11:00		Coffee break
11:30		<b>Session 2:</b> Bioplastics degradation Chair: Lukas Miksch (AWI)
11:30	Talk 5	<b>Simon Gölden</b> (Fraunhofer LBF) Guidelines to develop sustainable solutions from bio-based plastics
11:50	Talk 6	<b>Jannik Hallstein</b> (Fraunhofer LBF) Novel additive systems to enable the use of poly(lactic acid) in durable applications
12:10	Talk 7	<b>Zhi-Kai Chong</b> (TUHH) Assessing industrial composting and mechanical recycling of biobased biodegradable plastics as well as the implications for their use
12:30	Talk 8	<b>Ignacio Bernabé Virseda</b> (UPM) Promoting sustainability in the use of biodegradable biobased plastics through mechanical recycling
12:50		Lunch break

14:00		<b>Session 3: Bioplastics – “Bio” but not healthy?</b> Chair: Franz Stelzer (ACIB, Uni Graz)
14:00	Talk 9	<b>Miriam Weber</b> (HYDRA) How does your biodegradable plastic behave in the environment?
14:20	Talk 10	<b>Arantxa Ballesteros</b> (ITENE) Approaches for environmental impact assessment of bio-based plastics applied to aquatic environments
14:40	Talk 11	<b>Lukas Miksch</b> (AWI) Biodegradable microplastics: Uptake by and effects on the Rockpool shrimp <i>Palaemon elegans</i> (Crustacea: Decapoda)
15:00	Talk 12	<b>Reinhard Saborowski</b> (AWI) Marine crabs can hydrolyze biodegradable plastics
15:20		<b>Session 4: Wrap up and posters</b> Chair: Carolyn Brand
15:20		<b>Gafinen, Marie-Pascale</b> Wrap up of the day with illustrations
15:40		Poster pitching (brief presentation of each poster)
16:00		Coffee break
16:30		<b>Poster Session</b>
19:00		Dinner (Buffet in AWI-Atrium)

#### Thursday, 21 Sept 2023

09:00	Talk 13	<b>Carly Fletcher</b> (MMU) Keynote: Bio based plastic science and policy – the mismatch
09:30		<b>Session 5: Need and implementation</b> Chair: Jelena Barbir (HAW)
09:30	Talk 14	<b>Andrew Farmer</b> (IEEP) Exploring policy Issues with bio-based and biodegradable plastics
09:50	Talk 15	<b>Angelo Paletta</b> (UNIBO)

		Cooperation models for the bio-based plastics industry
10:10	Talk 16	<b>Hector Torres-Pierna</b> (ITENE) The role of fluorescent markers in enhancing the recyclability rate of biobased plastic blends
10:30	Talk 17	<b>Maria Aiello</b> (Digiotouch) Initial challenges and approach for Life cycle sustainability assessment in upcycling of PE and PET
10:30		Coffee break
11:00		<b>Session 6:</b> Round Table discussion Chair: Carolyn Brandt (PI)
Participants:		<p><b>Andrew Farmer</b> Senior Fellow, Climate and Circular Economy (CCE), Institute for European Environmental Policy, Belgium</p> <p><b>Ari Rosling</b> R&amp;D director at Arctic Biomaterials composite (ABM), Finland.</p> <p><b>Lars Gutow</b> Marine Ecologist at the Alfred Wegener Institute, Germany.</p> <p><b>Carly Fletcher</b> Research Associate at the Manchester Metropolitan University, UK.</p> <p><b>Maximilian Lackner</b> Circe Bioechnology, Austria</p> <p><b>Angelo Paletta</b> University of Bologna, Italy</p>
12:30		Lunch break
13:00		Conclusions and perspectives (Plenum) with Illustrations by <b>Marie Pascale Gafinen</b>
14:00		Farwell by the organizers from HAW, PI, and AWI
14:15		End of colloquium