

Marine-friendly biopolymers: characteristics and challenges

23 June 2023 - 9.00-12.00 CEST (online)

Context

What are the characteristics that marine-friendly biopolymers should have to become a potential solution to prevent and eliminate pollution in the oceans and waters, responding to <u>EU Mission Ocean's objectives</u>?

In the last years, the EC is funding several projects and initiatives to investigate under which conditions bio-based and biodegradable plastics can contribute to reduce pollution in our ecosystems. Nevertheless, the timescale for biodegradation of unintentional released bioplastics is not short enough in marine environment and doesn't sufficiently respond to market needs (performance, durability, etc.). In parallel, additional challenges should be considered (e.g. risk assessment, sustainability of bio-based feedstock, programmed biodegradation, standardisation in different environments, ecotoxicity, environmental persistence, entanglement and ghost fishing).

In the search for solutions to these challenges, researchers and stakeholders will be involved in an online round table on 23 June 2023, to discuss what are the characteristics and challenges that should be addressed for the **definition of marine-friendly biopolymers**.

As part of the "Projects2Policy" format, developed by Glaukos project, Bio-Plastics Europe, European Bioplastics Research Network and European Bioeconomy Network, this workshop "Marine-friendly biopolymers: characteristics and challenges" builds on the following previous experiences:

- The workshop <u>"Unlock the potential of bio-based and biodegradable plastics: challenges to be addressed"</u> 3 November 2022
- 7th EBRN EVENT "Projects2Policy: Aligning outcomes from EU projects with the EU policy for bio-based and biodegradable plastics" 23 November 2022

During the workshop, the main takeaways of additional relevant events will be also presented to the participants, in order to animate the discussion:

- <u>1st BlueMissionMed Stakeholder Forum</u> organised on 30 May 2023, in the context of the high-level event EU Mission 'Restore our Ocean and Waters by 2030' – The Mediterranean lighthouse in action Palermo
- Ilighthouse in action Palermo
 Glaukos workshop "How can marine-friendly biopolymers be a suitable solution for commercial fishing, aquaculture and agriculture?", organised on 6 June 2023, in the context of the annual convention of EUROCORD, the European Association of Rope, Twine and Netting manufacturers.

Objectives

The objective of the workshop is to encourage a holistic, collaborative debate, to define characteristics and challenges of marine-friendly biopolymers.

The discussion will be structured along the following topics:

- definition of marine friendly biopolymers
- programmed biodegradation
- ecotoxicity and overall risk assessment
- standardisation and labelling of marine-friendly biopolymers
- EU projects recommendations for future policies on marine-friendly biopolymers

Expected outcomes

- Facilitate mutual learning and cross-fertilisation of experiences among projects
- Facilitate the communication between the EU Policy Officers and projects
- Provide policy recommendations in light of incoming EU initiatives and policies







Т	arget
partici	pants

- EU funded projects
- Relevant initiatives
- Policy makers

Organisers

- Glaukos project aims to develop innovative bio-based textiles and coatings to significantly reduce the carbon and plastic footprint of clothing and fishing gear
- <u>Bio-Plastics Europe</u> project aims at delivering sustainable strategies and solutions for biobased plastics supporting the EU-Plastic Strategy and promote circularity in the economy
- <u>European Bioplastics Research Network (EBRN)</u>, an active community of representatives from universities, research institutions and enterprises interested in bio-based and biodegradable plastics research
- <u>European Bioeconomy Network (EuBioNet)</u>, a proactive alliance of more than 140 EU funded projects and initiatives in the bioeconomy, aiming at increasing knowledge sharing, networking and mutual learning.

Registration

The workshop is free of charge. To participate, please register at: https://forms.gle/celnbB7wHMAgjHAd7

For more information:

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AGENDA

	Opening and EC expectations with regards to marine-friendly biopolymers	Silvia Maltagliati – DG RTD
9:00 - 9:15	Greetings from Glaukos Project Officer and relevance of the workshop in the context of CBE JU activities	Simone Maccaferri – CBE JU
9:15 - 9:35	Objectives of the workshop, brief overview of Glaukos and Bio-Plastics Europe projects, expected outcomes, agenda and follow-ups.	Susanna Albertini – Glaukos project and EuBioNet Jelena Barbir – Bio-Plastics Europe and EBRN
	Open discussions (all projects	·
9:35 – 10:00	Discussion topic 1: How can we define marine-frie	•
	 What do we want to prevent with marine-friendly biopolymers? Technical requirements for the definition of marine-friendly biopolymers? 	
10:00 - 10:25	25 Discussion topic 2: Programmed biodegradation	
	 What are the application fields suitable for programmed biodegradation? What is needed for a safe biodegradation process? 	
40.05 40.05		
10:25 - 10:35	Coffee Break	
10:25 - 10:35	Discussion topic 3: Ecotoxicity and overall risk asse	essment
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	 Discussion topic 3: Ecotoxicity and overall risk asset What are the dimensions to be considered for the What are the models for risk assessment? 	the overall risk assessment? sess marine ecotoxicity for bio-based plastics?
10:35 - 11:00	 Discussion topic 3: Ecotoxicity and overall risk asset What are the dimensions to be considered for the what are the models for risk assessment? What are the methodological approaches to as 	the overall risk assessment? sess marine ecotoxicity for bio-based plastics? f marine-friendly biopolymers tion and labels of marine-friendly biopolymers?
10:35 - 11:00	 Discussion topic 3: Ecotoxicity and overall risk asset What are the dimensions to be considered for the What are the models for risk assessment? What are the methodological approaches to as Discussion topic 4: Standardisation and labelling of What are the requirements for the standardisation and downward of the potential risk assessment? 	the overall risk assessment? sess marine ecotoxicity for bio-based plastics? f marine-friendly biopolymers tion and labels of marine-friendly biopolymers? ks of poor public perception, mis-use or
10:35 - 11:00 11:00 - 11:25	 Discussion topic 3: Ecotoxicity and overall risk asset What are the dimensions to be considered for the what are the models for risk assessment? What are the methodological approaches to as Discussion topic 4: Standardisation and labelling of the what are the requirements for the standardisation. How do we address/overcome the potential risk greenwashing? Discussion topic 5: EU projects recommendations 	the overall risk assessment? sess marine ecotoxicity for bio-based plastics? f marine-friendly biopolymers tion and labels of marine-friendly biopolymers? ks of poor public perception, mis-use or for future policies on marine-friendly lly implemented in the current EU policy?

