

# Science Communication Plan of the COST Action CA21159

## Understanding interaction light - biological surfaces: possibility for new electronic materials and devices (PhoBioS)

### VERSIONS AND HISTORY OF CHANGES

Version	Date of adoption by MC	Notes (e.g. changes from previous versions)	Lead author(s)*
1.0		First document	Paweł Wityk, Małgorzata Szczerka

*\* The Science Communication plan is developed, updated and its implementation monitored under the overall supervision of the Science Communication Coordinator, and in close collaboration with other relevant contributors.*

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# 1. SUMMARY

The overarching objective of the Action strategy for communication, dissemination, and valorization of the Action (CA2115) results is to effectively share and promote the outcomes of the project. This entails raising awareness regarding the project's activities, consistently and coherently distributing information, and maximizing the impact of the Action. The key elements of the strategy comprise identifying and utilizing appropriate communication and dissemination channels, targeting relevant audiences, and ensuring timely and effective sharing of information. The implementation plans for the strategy involve outlining specific activities and actions to be undertaken throughout the entire duration of the Action, from initiation to completion. This encompasses defining the tools, channels, and means of communication to be employed as well as establishing target groups and setting significant dates, milestones, and deliverables associated with the planned activities and events. Within the Action, the responsibilities for communication and dissemination have been organized to ensure effective coordination and participation of the participants. This includes the role of the Science Communication Coordinator, who is responsible for overseeing and managing the communication efforts of the project. Furthermore, a dedicated Working Group (WG) focused on communication and dissemination has been established. These individuals and groups will collaborate to implement the communication and dissemination plans, ensuring effective communication, dissemination, and appreciation of the Action's results.

The main objective of this Communication and Dissemination Plan within the Cost Action is to identify and promote effective channels and activities for communication and dissemination. The aim is to broaden and enhance the impact of the Action by increasing awareness of the project's initiatives, consistently sharing information about its outputs, and maximizing overall influence. The goal is to ensure that all relevant information reaches the appropriate audiences promptly and through the most effective means. This document provides a comprehensive plan that outlines the proposed communication and dissemination activities for the entire duration of Action, from 1 Month to Month 48. It includes details regarding the tools, channels, and methods of communication that will be employed throughout the project. The plan also identifies the target groups and highlights important dates, milestones, and deliverables associated with planned actions and events. Throughout the project, the communication and dissemination activities will evolve and adapt to suit the changing needs and preferences of the Action. They will be customized to effectively reach the intended audiences and will be continuously monitored.

# 2. GENERAL AIM AND TARGET AUDIENCES

PhoBioS strives to effectively communicate, disseminate, and enhance the value of the Action's outcomes, with the aim of maximizing its impact and reaching a diverse range of target audiences. Given the unique challenges, objectives, and deliverables of the Action, this section outlines the specific objectives of communication, dissemination, and valorization, while identifying the target audiences involved in these activities. The plan emphasizes the necessity of online and physical/hybrid events to engage the audiences effectively. To ensure a comprehensive communication plan, it is crucial to define clear objectives and key messages tailored to each target audience. By engaging various audiences, the visibility of the Action and its results can be amplified and comprehensible even to non-specialists. The specific objectives related to communication, dissemination, and valorization of PhoBioS Action results include:

- Raising Awareness: The plan aims to create awareness regarding the Action, its objectives, and the importance of PhoBioS in biology, chemistry, photonics, and electronics. Key messages will underscore the potential benefits and applications of PhoBioS in addressing current societal and industrial needs.

- **Engaging Researchers and Practitioners:** The plan seeks to reach researchers and practitioners in the field of photonics, facilitating the transfer of knowledge and fostering collaborations beyond discrete communities. Key messages will focus on the scientific advancements, research outcomes, and practical applications of photonics.
- **Informing Key Stakeholders:** The plan seeks to inform policymakers, industry professionals, and relevant organizations about the progress and developments in the field of photonics. Key messages will emphasize the potential economic, environmental, and social impacts of utilizing photonics in basic and applied sciences.
- **Public Engagement:** The plan aims to engage the general public and non-specialists by making the Action and its outcomes accessible and understandable. Key messages will highlight the significance of photonic structures found in nature.

To reach these target audiences, a variety of communication strategies and activities will be employed, including online and physical/hybrid events. Some of the proposed activities include:

- Participation in high-ranking scientific conferences and workshops
- Organization of workshops and training sessions to facilitate knowledge exchange and collaboration within the research community.
- Regular communication of project updates, outcomes, and publications through a dedicated website and social media platforms.
- Publication of research results in scientific journals, edited volumes, and conference proceedings.
- Facilitation of short-term scientific missions (STSM) to encourage exchange visits between researchers, enabling knowledge transfer and collaboration.

Knowledge transfer to other projects and initiatives related to PhoBioS, ensuring the wider dissemination of PhoBioS members' expertise. By implementing these communication and dissemination activities, PhoBioS aims to increase the visibility and impact of its results among various target audiences, fostering collaboration, knowledge exchange, and the practical implementation of photonics structures in the industry. This approach should facilitate knowledge broadening and transfer.

### 3. PLAN FOR THE COMMUNICATION OF ACTION RESULTS

In order to raise awareness and promote the PhoBioS Action and its results to the general public, end-users, civil society, and mass media, effective communication is of paramount importance. The communication approach will entail using language that is widely accessible and defining key messages associated with the Action's aim, approach, expected results, and impact. To achieve effective communication, the following tools and channels are proposed:

- **Development of an Action Website** - A dedicated website will be created as a central hub for information regarding the Action, its objectives, ongoing activities, and outcomes. This website will provide access to publications, reports, and relevant resources.
- **Utilization of popular social media platforms** - Twitter, Facebook, and LinkedIn will be utilized to disseminate key messages, project updates, and engage with the target audiences. Regular posts, infographics, and short videos/animations can be shared to generate interest and increase visibility.
- **Issuance of press releases:** Significant milestones, research findings, and events related to the Action will be announced through press releases. These press releases will be distributed to both traditional and digital media outlets to reach a broader audience.
- **Development of informative infographics:** Visually appealing infographics will be created to convey key

messages, research findings, and the impact of the PhoBioS Action..These infogrphics will be shared on the website, social media platforms, and included in press releases.

- Creation of engaging videos or animations: Videos or animations will be produced to explain the concept of PhoBioS, showcase research activities, and highlight the potential benefits for sustainable agriculture. These videos can be shared on the website, social media, and used for presentations and public events.
- Production of podcasts: Podcasts featuring interviews with researchers, practitioners, and experts in the field of photonics will be produced. These podcasts can explore various aspects of the Action, research findings, and real-world applications, making the information accessible to a wider audience.

In addition, the following communication products will be developed:

- Action Logo and Visual Identity - a distinctive logo and visual identity representing the PhoBioS Action will b created. This visual identity will be consistently used across communication materials to establish brand recognition.
- Design of templates – Templates for presentations, reports, and other documents will be designed to ensure a consistent and professional appearance.
- Creation of a concise leaflet – A concise and visually appealing leaflet will be developed, providing an overview of the Action, its objectives, and key messages. This leafletcan be distributed at events, conferences, and other relevant gatherings.

A tentative timeline for the development, production, and utilization of these communication tools and products is included in this section. Table 1. outlines the milestones and deadlines for the creation of the website, social media presence, press releases, infographics, videos/animations, podcasts, and other communication materials. Table 2. and Table 3. Present the detailed action to be taken in distinct years of the projected timeline, as well as the types of communication for academic and non-academic stakeholders. This timeline aligns with the overall timeline of the Action to ensure timely dissemination of information and engagement with the target audiences. The section also explains the connections between the communication plan and any Action deliverables related to communication listed on e-COST, ensuring that the communication activities align with the Action's objectives and deliverables, contributing to the successful implementation and impact of the project.

Table 1. Timeline for the development, production, and use of these communication tools.

<b>N</b>	<b>Tool</b>	<b>Lunch date</b>	<b>End date</b>	<b>Milestone</b>	<b>Action outcome</b>	<b>Responsible</b>	<b>Notes</b>
<b>1</b>	Website	2023	2026	1 website created	Promotion of the Action and its results. Raising awareness about the topic.	Dissemination offciers	-
<b>2</b>	Twitter account	2023	2026	1 Twitter account created	Promotion of the Action and its results. Raising awareness	Dissemination offciers	-

					about the topic.		
3	LinkedIN account	2023	2026	LickedIn account created	Promotion of the Action and its results. Raising awareness about the topic.	Dissemination officers	-
4	Review Article	2025	2026	1 review article as summary of works during COST action	Promotion of the Action and its results. Raising awareness about the topic.	All	As many participants as possible
5	Sceintific articles	2024	2026	At least 5 afiliated scientific articles with acknowldgments to COST action	Promotion of the Action and its results. Raising awareness about the topic.	All	5 articles in total

Table 2. Audience and types of channels used for the communication.

Audience	Channel	Tool
Academics and scientific community	Online/Onsite Events	website, event organiser's website, conferences, social media, online repository, event videos, conferences, PhoBioS meetings, WG meetings, STSMs,
Wider public	Online/Onsite Events	Free online lectures, videos and graphics Exhibitions, public talks
Industry	Online/Onsite Events	Conferences, free online lectures, videos and graphics, social media

Table 3. The detailed list of dissemination activities id distinct years of the project.

Year	Activities
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1	<ul style="list-style-type: none"> <li>• Launch of social media accounts (Twitter @PhoBioS_Network)</li> <li>• Launch of the PhoBioS website</li> <li>• Work on an online repository with information on researchers and practitioners</li> <li>• Public lectures and exhibitions</li> <li>• Public programs as part of PhoBioS' activities (lectures, exhibitions, online talks)</li> <li>• Dissemination in conferences, STSMs, and networking activities</li> </ul>	
2	<ul style="list-style-type: none"> <li>• Launch of a repository of researchers with scientific equipment</li> <li>• Dissemination in conferences, STSMs, and networking activities</li> <li>• Public programs as part of PhoBioS' activities (lectures, exhibitions, online talks)</li> </ul>	
3	<ul style="list-style-type: none"> <li>• Dissemination in conferences, STSMs, and networking activities</li> <li>• Dissemination in meetings, STSMs, and networking activities</li> <li>• Public programs as part of PhoBioS' activities (lectures, exhibitions, online talks)</li> </ul>	
4	<ul style="list-style-type: none"> <li>• Preparation of review article</li> <li>• Dissemination in meetings, STSMs, and networking activities</li> <li>• Public programs as part of PhoBioS' activities (lectures, exhibitions, online talks)</li> </ul>	

## 4. PLAN FOR THE DISSEMINATION OF ACTION RESULTS

The dissemination activities of the PhoBioS Action aim to ensure the accessibility and beneficial utilization of its knowledge and results by the target audiences. Tailored information is provided to each specific audience, utilizing appropriate language and formats. The Action remains committed to principles of Open Science and Open Access if possible, guaranteeing openness, accessibility, and compliance to FAIR (Findable, Accessible, Interoperable, and Reusable) principles and Intellectual Property Rights (IPR). The planned dissemination products will be developed following a tentative timeline and will involve the active participation of Action participants. Specific Working Groups are assigned to work on planned special issues or publications WG1-3. The identification and description of relevant target events, conferences, scientific journals, or other platforms for disseminating the Action's results will be of utmost importance. Additionally, any connections between the dissemination plan and relevant Action deliverables listed on e-COST will be explained to ensure a coordinated approach.

Customization of language and formats for specific target audiences:

- Dissemination through scientific publications, conference presentations, and specialized research forums using technical language and detailed methodologies.
- Accessible language, infographics, videos, and public talks to engage and inform non-specialist audiences.

Application of Open Science and Open Access principles:

- Publishing research findings in open-access journals or repositories if possible to ensure wide accessibility.
- Sharing data sets, methodologies, and protocols following FAIR (Findable, Accessible, Interoperable, and Reusable) principles.
- Ensuring compliance with intellectual property rights (IPR) and licensing agreements.

Planned dissemination products, timeline, and involvement of Action participants:

- Submission of scientific papers to relevant journals and conferences throughout the project timeline.
- Creation of visually appealing content to convey key messages and findings to diverse audiences.
- Organizing workshops, seminars, and webinars to disseminate research outcomes and engage with stakeholders.
- A detailed schedule outlining the development, finalization, and dissemination of each dissemination product, with the participation of relevant Action participants.

Identification and description of target events, conferences, journals, or other forums:

- Identification of conferences aligned with the scope of the Action and submission of abstracts for presentations or posters. Collaboration with scientific journals to publish special issues dedicated to the Action's research topics.
- Partnership with related projects or initiatives to exchange knowledge and disseminate findings.

Links between the dissemination plan and relevant Action deliverables listed on e-COST:

- Ensuring alignment between the planned dissemination activities and the deliverables outlined in the Action's e-COST project description.
- Tracking and reporting on the progress and completion of each deliverable related to dissemination.
- Incorporation of dissemination outputs into the Action's overall timeline and milestones to ensure effective communication of project achievements.

## 5. PLAN FOR THE VALORISATION OF ACTION RESULTS

The maximization of the impact of Action results and the creation of societal, economic, or policy benefits are the central objectives of valorization. This section outlines the strategies and approaches intended to support the scientific, technological, and socio-economic impacts envisioned by the Action. It also addresses the engagement of potential end users and stakeholders during and after the project's duration, identifies relevant Action results beyond the scientific community, and suggests methods to foster synergies with partners for the purpose of valorisation.

Supporting scientific, technological, and socio-economic impacts:

- Collaborating with industry partners, policymakers, and relevant stakeholders to ensure the practical applicability of research outcomes.
- Engaging in knowledge exchange activities such as workshops, seminars, and policy briefings to disseminate results and stimulate practical implementation.
- Developing guidelines or recommendations for practitioners and policymakers based on the Action's findings.

Identifying potential end users and stakeholders:

- Conducting stakeholder analyses to identify key individuals, organizations, or sectors that can benefit from the Action's results.
- Establishing partnerships and communication channels with these stakeholders to facilitate knowledge transfer and adoption of Action outcomes.

Mapping relevant Action results beyond the scientific sphere:

- Identifying how the Action's results can contribute to societal challenges, innovation, policy-making, or economic development.
- Highlighting the potential practical applications, economic value, or policy implications of the research findings.

Promoting synergies with partners for valorisation:

- Collaborating with industry, policymakers, and other relevant partners to develop joint projects, initiatives, or funding proposals that build upon the Action's results.
- Engaging in knowledge exchange activities, joint publications, or joint events with partners to enhance the visibility and impact of the Action's outcomes.

Data protection and IPR considerations:

- Addressing data protection and privacy concerns by ensuring compliance with relevant regulations and ethical guidelines.
- Identifying any intellectual property generated within the Action and developing appropriate strategies for protection, licensing, or dissemination.

Links with valorisation-related deliverables listed on e-COST:

- Describing the connections between the planned valorisation activities and the specific deliverables outlined in the Action's e-COST project description (Tab. 1-3)
- Demonstrating how the valorisation plan aligns with the overall objectives and expected outputs of the Action. (Tab. 1-3)

The valorisation plan entails the development and maintenance of an online repository with information on researchers, practitioners, and research outcomes. This aligns with the Action deliverable "Online Repository" listed on e-COST, which aims to provide a centralized platform for sharing and accessing research materials. The valorisation plan emphasizes the use of social media platforms and online communication channels to reach a broader audience and promote the Action's results. This aligns with the Action deliverable "Social Media Accounts" listed on e-COST, which involves the establishment and management of social media accounts to disseminate project updates and engage with target audiences. The valorisation plan includes the publication of newsletters, scientific articles, and other publications to communicate the research findings to relevant stakeholders. This aligns with the Action deliverable "Newsletters and Publications" listed on e-COST, which aims to produce periodic newsletters and scientific publications to share project updates and research outcomes. The valorisation plan highlights the participation in conferences, workshops, and other dissemination events to present the Action's results and engage with target audiences. This aligns with the Action deliverable "Dissemination Events and Conferences" listed on e-COST, which involves organizing and participating in relevant events to showcase the research outcomes. All the detailed information including the dispatch dates and milestones with exact time table are presented in Tab 1-3. Section 3 of this document.



## ANNEX 1

The tables below are meant to provide an overview to the Action of relevant dimensions to be considered while structuring the Science Communication Plan. Table 1 highlights the different scope of Dissemination and Communication activities, while Table 2 underlines key questions to be addressed in each plan.

**TABLE 1. COMMUNICATION – DISSEMINATION – VALORISATION**

	COMMUNICATION	DISSEMINATION	VALORIZATION
Objectives	<p>Promotion of the Action and its results. Raising awareness about the topic.</p> <p>Inform, promote and communicate – Visibility</p>	<p>Public disclosure about the Action results only.</p>	<p>Make concrete use of results for research, knowledge transfer or commercial use.</p>
Expected Impact	<p>Show the success of research collaboration. Engaging with society to show how it can benefit from the Action results.</p>	<p>Maximise result's impact. Allow researchers to go a step forward. Make Action results a common good.</p>	<p>For socio-economic purposes, further research, market validation, licencing, norms setting, standardisation. Represents society's direct &amp; indirect return on the public sector's investment in research.</p>
Audiences	<p>Reaching multiple audiences from general public, citizens, civil society, and mass media</p>	<p>Groups that may use the results in their own work including peers, industry, stakeholders.</p>	<p>Not only researchers: incubators, venture capital, local, national or EU-related innovation ecosystems</p>

		Regarding policymakers, engage and share evidence-based results during the legislative process.	including policy-makers, industry, SMEs, sector of interest, civil society.
<b>Languages</b>	Non specialist language, layman – avoid jargon Be understandable.	Scientific and specialist language/jargon.	Combines both general and technical language to present reports, results, prototypes, software, data, etc.
<b>Channels &amp; Tools</b>	Public debate, TV channels, radio, newspapers, websites, social media targeting general public.  Leaflet/brochure, infographics, multimedia (podcast, webinars, videos)	Peer-review journals, scientific or stakeholder conferences, online repository of results, etc.  Leaflet/brochure, infographics, multimedia (podcast, webinars, videos)  EU related platforms and services such as Open Research Europe, European Open Science Cloud.	Stakeholder groups and events, industry publications/reports, competitions/awards.  EU related platforms and services such as CORDIS, Horizon Results Booster, Innovation Radar, Horizon Results platform, European Patent Office.

**TABLE 2. THE 5 W TO STRUCTURE YOUR PLAN**

<b>WHY</b> It is relevant to communicate about the Action?	A few examples: <ul style="list-style-type: none"> <li>• Research has been scattered across Europe;</li> <li>• Urgent need for a coordinated and joint effort to build a collaborative platform linking science, industry, and management;</li> <li>• Raise awareness;</li> <li>• Bring added value of belonging to a multidisciplinary network involving numerous countries;</li> <li>• To spark new collaborations.</li> </ul>
<b>WHAT</b> is the key message?	Consider the Action MoU to set the objectives and develop the main key message.  A few examples: <ul style="list-style-type: none"> <li>• Improve the quality of the air, water, health, roads, buildings;</li> <li>• Change the current legislation;</li> <li>• Explore new techniques in treating cancer.</li> </ul>
<b>WHO</b> is the target audience?	A few examples <ul style="list-style-type: none"> <li>• Scientific community, Scientists, Academia;</li> <li>• Businesses, industry, SMEs;</li> <li>• NGOs, Citizen organisations, patient groups;</li> <li>• Authorities, Policymakers and specify at what level: local; regional; national; European or international...</li> </ul>
<b>WHERE</b> and how to communicate & disseminate?	Use the tools and channels to convey the key message of your network <ul style="list-style-type: none"> <li>• Public debate;</li> <li>• TV channels, radio, newspapers, websites, social media;</li> </ul>

	<ul style="list-style-type: none"> <li>• Workshops, training schools, conference, fairs, festivals, campaign...</li> </ul>
<p><b>WHEN it is appropriate to start communicating &amp; disseminating?</b></p>	<p>A general recommendation - From the start to the end</p> <p>Think of timeliness – key moments during the lifetime of the Action when there is something new to release.</p> <ul style="list-style-type: none"> <li>• When setting the network to introduce the Action;</li> <li>• When the website &amp; social media are set;</li> <li>• When there are some results to release;</li> <li>• When participating to an activity that has a wider scope with key stakeholders;</li> <li>• When a joint scientific publication is published;</li> <li>• When other evidence-based results and output are available.</li> </ul> <p>In short: not only at the end of the Action but during the lifetime. Planning is key: a dissemination calendar based on the Action planned activities and milestones is helpful to identify key moments.</p>