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DELIVERABLE

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Executive Summary

This deliverable describes the communication activities carried out in the frame of the HYDROPTICS project as per November 30, 2023 (M48). We focus more specifically on the communication kit that was developed, the press releases that were published, as well as the final online Workshop that took place at the end of the project.

Table of Contents

Executive Summary	2
Table of Contents	3
1. Introduction	4
2. Communication kit	4
Website	4
Social Media	5
Brochure / Banner	5
Videos	6
3. Press releases	6
4. Final online workshop	8
5. Effects of Covid-19 and Partner termination on the project	10
Conclusions	11

1. Introduction

The Hydroptics consortium used various channels to communicate the projects' goals and its main achievements. For this purpose, a communication kit was developed, press releases were published when significant results were obtained, and an online Workshop, held at the end of the project, introduced Hydroptics' key concepts, technologies, and achievements to a broader audience.

2. Communication kit

The Consortium developed a communication kit based on several tools:

- 💧 Dedicated website
- 💧 Dedicated pages on social media
 - 💧 LinkedIn
 - 💧 X (ex-Twitter)
- 💧 Brochure and banners
- 💧 Videos

Website

The HYDROPTICS website is accessible at <http://hydroptics.eu/>. The website was continuously updated with newsletters, press releases, events announcements, and public deliverables. The general structure has remained the same since it has proven to be an efficient one. The overview of the pages of our website can be found in **Error! Reference source not found..**

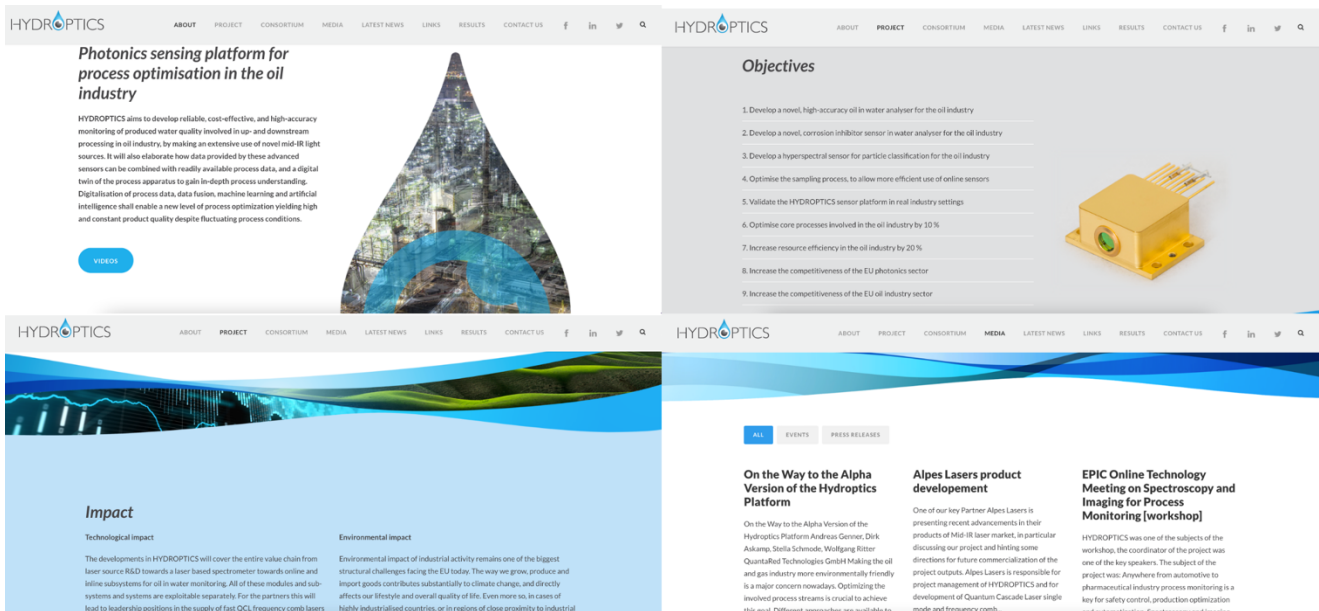


Figure 1: Pages of the HYDROPTICS website.

We used the website as principal platform for dissemination material, we added all the information related to the project into the website and we linked the website on almost all the social media posts.

The website incorporates all the basic project information, news, press releases, newsletters, events, publications, public deliverables, blog posts, collaboration with similar projects and initiatives and a library including the available

promotional material and the project’s general presentation. Information regarding the technical details and content types can be found in the deliverable D9.1 “Dissemination plan and material”.

Social Media

Hydroptics was also present on social media. The project possesses accounts on:

- 🔵 LinkedIn
- 🔵 X (ex-Twitter)

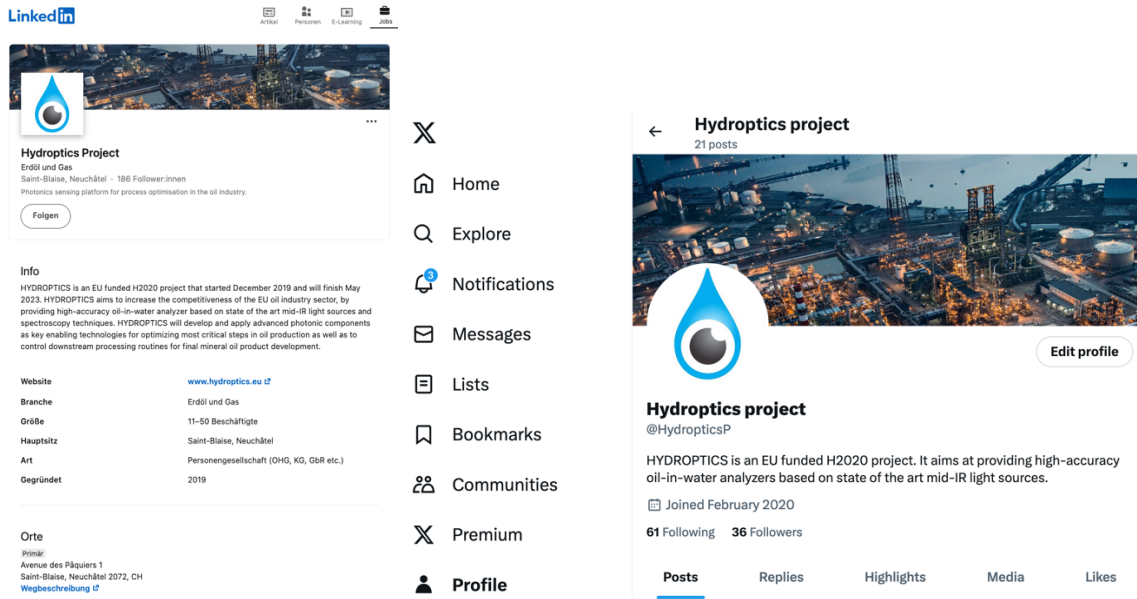


Figure 2: Hydroptics LinkedIn (left) and X (right) pages.

Brochure / Banner

The HYDROPTICS project developed several versions of brochure and banner. Their final versions are available on our website. The brochure and the banner are shown in Figure 3, the full quality brochure and banner can be downloaded through the following links:

https://hydroptics.eu/wp-content/uploads/2020/12/HYDROPTICS_brochure.pdf

https://hydroptics.eu/wp-content/uploads/2020/12/Hydroptics_banner.pdf



Figure 3: a) Hydroptics brochure two sides; b) Hydroptics banner.

Videos

The project was presented in multiple conferences and workshops and few insightful video materials was produced.

As the platform development and field tests were severely impacted by the sudden and unexpected termination of a key partner, the production of a video introducing the project, the field validation results, as well as the innovations developed within the project, was delayed. Once produced, this video will be shared via the project's website and social media.

3. Press releases

We intended to be proactive on press releases all along the project, our belief being that press releases are one of the most efficient methods of awareness raisings, and for attracting people from various fields. We updated our followers of every important event, achievement, and upcoming events of the project. At the end of the project, we initiated and published 10 Press Releases that contained very insightful and interesting information on new findings of the project, as well as related to events participated as a project. After assembly of the final Hydroptics' modules and successful completion of the two pilot tests, we plan to prepare and publish a Final Press Release.

Table 1: List of Press releases with descriptions (updated)

Title	Description	Link
HYDROPTICS Press release	Announces the start of a project HYDROPTICS	https://hydroptics.eu/hydroptics-press-release/
Hydroptics kick-off meeting	Release describing the first kick-off meeting of the project	https://hydroptics.eu/hydroptics-kick-off-meeting/
Photonics21	Scientists use Photonics to Make Wastewater eco-friendly	https://www.photonics21.org/2020/scientists-use-photonics-to-make-wastewater-eco-friendly
Online oil-in water detector	Presenting results on dual-laser balanced detection of oil	https://hydroptics.eu/online-detector/
Dual-Comb spectroscopy for oil detection	Presenting results on dual-comb spectroscopy for oil detection	https://hydroptics.eu/online-oil-in-water-detector/
Multiphase separation of two liquids	Presenting the results on novel centrifugal separator, patent description	https://hydroptics.eu/multiphase-separation-of-two-liquids/
Hyperspectral Imaging of Process Water	Presenting results on newly developed Hyperspectral imaging module for	https://hydroptics.eu/hyperspectral-imaging-of-process-water/
Alpes Lasers product overview	Alpes Lasers describing the latest devices including the developments in the HYDROPTICS projects	https://youtu.be/LfjHhFI-ai4?t=675

On the Way to the Alpha Version of the Hydroptics prototype	Describing the upcoming alpha prototype of the project	https://hydroptics.eu/on-the-way-to-the-alpha-version-of-the-hydroptics-platform/
Particle manipulation with ultrasound waves	Describing the method of particle manipulation with ultrasound waves for efficient imaging	https://hydroptics.eu/particle_manipulation_with_ultrasound_waves/
Final press release <i>(title to be determined)</i>	Announcement of the assembly of the final module and the successful completion of the two pilot tests at partners' premises.	

Technical and scientific press releases:

We published 6 press releases related the significant achievements of the project with the following titles:

- 💧 Online oil-in water detector
- 💧 Dual-Comb spectroscopy for oil detection
- 💧 Multiphase separation of two liquids
- 💧 Hyperspectral Imaging of Process Water
- 💧 On the Way to the Alpha Version of the Hydroptics prototype
- 💧 Particle manipulation with ultrasound waves

These Press releases concentrated on significant technical and scientific achievements of the project. By publishing the scientific achievement of the project, we identified early adapters, and tried already to adapt our system to the demands of the market. These press releases were the backbone of the awareness raising stage since this platform allows to share at the very early stage of the prototype development the results and the vision of the prototype.

Photonics21:

We were featured on Photonics21 journal with a title “Scientists use Photonics to Make Wastewater eco-friendly”.

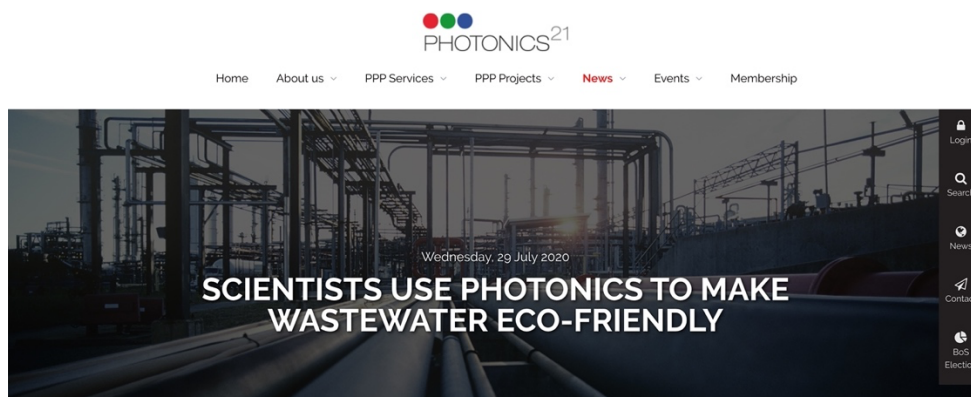


Figure 4: Photonics21 press release on HYDROPTICS.

In this article we discussed the very important aspect of the project namely the ecological aspects. More details can be found through the following link:

<https://www.photonics21.org/2020/scientists-use-photonics-to-make-wastewater-eco-friendly>

4. Final online workshop

On December 15th, 2023, HYDROPTICS organized a dedicated online workshop entitled:

Photonics-based platform for process optimisation in the oil industry – Presentation of the next generation tools

The goal of this final workshop was to introduce the project and its main achievements to a broad audience. The six speakers were selected among Hydroptics’ partners, to give an overview of the projects, its goals, the concept and technologies behind the platform, the tools that were developed in the frame of the project, as well as its main achievements. The agenda was the following:

10'	HYDROPTICS – the challenge and solutions Dr David Gachet, Alpes Lasers SA
20' + 10' Q&A	Coherent control of FM-combs with radio-frequency injection Prof. Benedikt Schwarz, Technical University of Vienna
20' + 10' Q&A	Innovative Integration of Dual-DFB Quantum Cascade Lasers on Silicon Photonics Platform Dr Dongbo Wang, IMEC & Ghent University
20' + 10' Q&A	Compact Solution for Continuous Sample Conditioning Dr Bahram Haddadi, Technical University of Vienna
20' + 10' Q&A	Novel mid-IR analyser for the oil industry Dominik Wacht, Technical University of Vienna
20' + 10' Q&A	The Hydroptics particle sensing system Dr Thomas Arnold, Silicon Austria Labs
20' + 10' Q&A	The value of field-testing online analysers Dr Martin Datler, OMV



Figure 5: Banner of the Hydroptics' final workshop

The workshop was recorded and will be shared online on YouTube soon. Before proceeding, we need the formal approval of speakers' organizations.

The workshop attracted in total 65 attendees (from 78 initial registrations), working for universities, R&D centers, and companies active in photonics, mid-infrared spectroscopy, or oil & gas.

More details of the workshop can be found through this link:

<https://hydroptics.eu/workshop/>

Follow-up with participants will be specifically organized to identify organizations potentially interested in the technology.

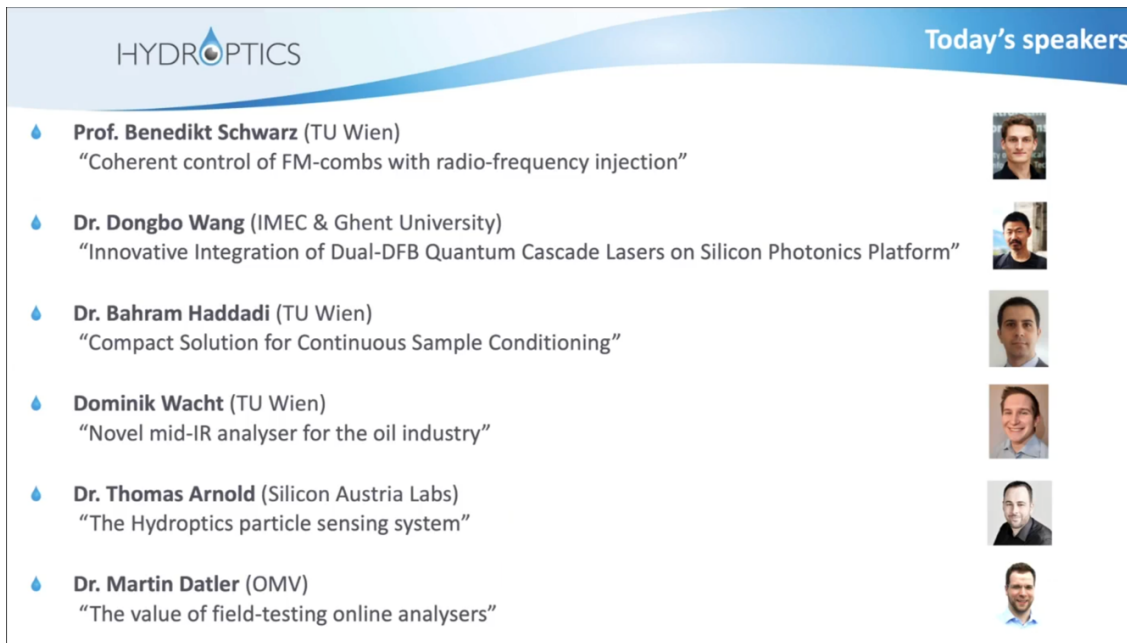


Figure 6: Slide introducing the speakers of the Hydroptics online workshop.

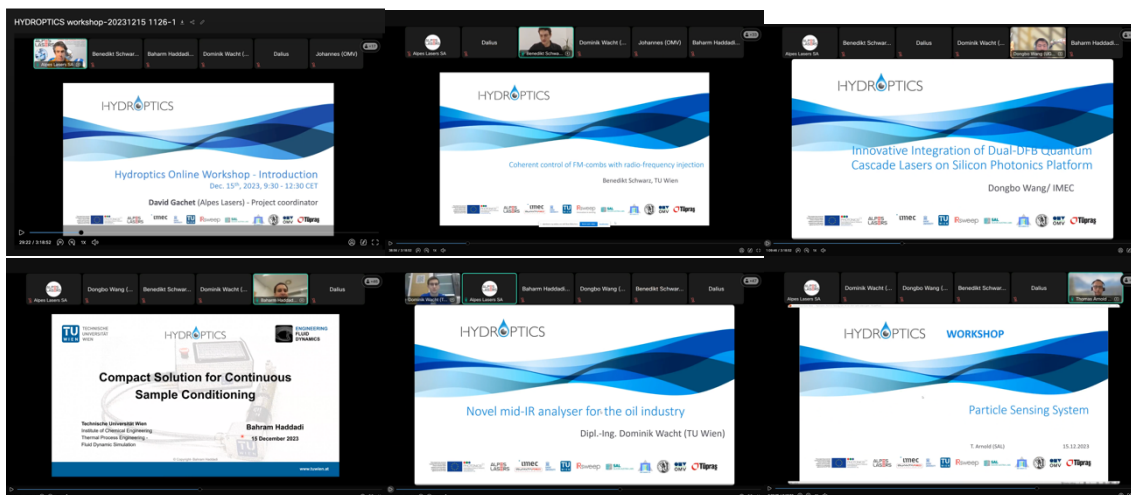


Figure 7: Selected screenshots of the Hydroptics online workshop.

5. Effects of Covid-19 and Partner termination on the project

As mentioned in Deliverable D9.2, the COVID pandemic severely impacted the project, slowing down work completion (lockdowns), obliging all Consortium meetings between M5 and M24 to be held remotely, and preventing Partners from physically attending conferences and fairs. The Consortium had to adapt, and most communication activities were held online.

In addition, and as mentioned previously in this report, one of the key Hydroptics' partners terminated its participation to the project early 2023, thus slowing down the completion of the Hydroptics platform, and preventing the Consortium from communicating impactful results before the December 2023's workshop.

Conclusions

This deliverable concludes the reporting on the communication activities performed in the frame of the Hydroptics project. It focused more specifically on the communication kit that was developed, the press releases that were published, as well as the final online Workshop that took place at the end of the project.