

PhotoCityTex

Air pollution treatment in European urban environments by means of photocatalytic textiles



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After-LIFE COMMUNICATION PLAN



Project Objectives

In urban environments there is a huge variety of textiles used in applications as diverse as awnings, canopies, umbrellas, dividers, tents, roofing construction/maintenance, textile facades, blinds, etc. These textile elements represent a significant fraction of the available urban surface and therefore they could be considered as potential components to be functionalized with photocatalytic materials in activities related to depollution of contaminated atmospheres.

The general objective of this project is to demonstrate the environmental possibilities of textiles with photocatalytic activity with a view to decontaminating urban areas. This initiative takes advantage of the technical opportunities offered by the textile architecture industry and the current advances in photocatalysis technology to face air depollution challenge in urban environments.

This general objective leads to the following specific objectives:

- Manufacture of photocatalytic textile demonstrators to be applied as decontamination systems in urban environments.
- Study of the photocatalytic properties of two types of textile based architecture elements: awnings and wall coverings on laboratory and semi-industrial scales.
- Demonstrate the application of photocatalytic textiles and estimate their efficiency by testing them on a larger scale under atmospheric controlled conditions at the EUPHORE simulation chamber.
- Demonstrate their use in a real polluted environment by installing some photocatalytic textiles at different urban locations in the town of Quart de Poblet (Valencia, Spain) and conducting field measurements before and after installing the prototypes.
- Provide a basis to encourage local authorities and stakeholders to adopt a more integrated approach on urban air quality management and to implement the techniques and methods successfully tested in the PHOTOCITYTEX project.

In general, great part of any project success principally depends on the dissemination strategy; therefore, it is important to correctly select the channels and the target audience in order to spread the project outcomes as far as possible.

Dissemination activities were performed through several instruments and media. Actually social media and web facilities enhance diffusion and remain active during a long time period. The main instruments and media are:

- Dissemination material:
 - Notice boards and leaflets
 - USB: containing dissemination material
 - Informative video
 - Layman's report
- Web and Social Media:
 - Project Website
 - Project information in official partners websites
 - Social media: Facebook, Twitter
- Dissemination Events:
 - Oral presentations with info on the project info and results
 - Posters
 - Distribution of dissemination material: USB, leaflets, etc.
- Press Media
 - Articles
 - Interviews
 - Press releases
 - Reports

The webpage will be maintained for 5 years after the project's end. All the information and dissemination material currently contained will be accessible. This includes a description of the project, structure and actions and main results. Besides, project newsletters, notice boards, leaflets, links to main dissemination activities, the Layman report and the project's video are contained and can be acceded. Furthermore, new related activities will be updated.



Stakeholders of the project are the main target audience of current and future dissemination activities. Stakeholders are mainly textile industry and local and regional administrations. First ones have the opportunity to produce a new product with the added value of air depollution, while the different administrations have a new tool for reducing air pollution levels in their territories. General public is always an important target as this product can be also implemented for particular use or for small business like shops, restaurants, etc., which are very common in towns and city centers.

Future Dissemination Plan

Taking into account the importance of dissemination for different interest groups, in the coming years a number of dissemination activities will be planned at the national and international levels, according to the capabilities of the partners.

Dissemination material

All the Dissemination material produced in the project will continue to be available to be distributed between the stakeholders in the different events that will be attended. Special focus will be placed on the USB, containing Layman's report and other dissemination material, which will continue to be distributed amongst textile companies, Universities, Scientific centers, environmental bodies, etc.

Dissemination activities

As an example, in the following table some of the dissemination activities currently done right at the end of the project (since June 2017) and planned for the coming years are detailed.



Partner	Stakeholder	Date	Activity
AITEX	Textile Industry	7 th – 9 th September 2017	HOME TEXTIL PREMIUM Fair, in Madrid
AITEX	General Public	17 th – 20 th October 2017	A+A Safety, Security and Health at Work. International Trade Fair with Congress.
LEGAMBIENTE	General Public	2018	Ecomondo Fair
LEGAMBIENTE	General Public	2017	Mal'aria campaign
AITEX	Administrations General Public	November 2017	ECOFIRA (Valencia, Spain)
CEAM	Building Sector	30 th November 2017	Jornada Técnica Nacional de Fotocatálisis: Materiales de última generación para construcciones sostenibles.
LEGAMBIENTE	Administrations General Public Scientific Community	15th February, 2018	General Assembly CAPTOR project (H2020), Rome
AITEX	Textile Industry	2019	XXV IFATCC International Congress
AITEX	Textile Industry	April 2018	10th International Conference on Fiber and Polymer Biotechnology. Brasil
LEGAMBIENTE	Administrations General Public Scientific Community	End 2018	CAPTOR (H2020 project) Final Event
LEGAMBIENTE	General Public	2019 and 2020	Ecomondo Fair
LEGAMBIENTE	Administrations, General Public	2019 and 2020	Mal'aria campaign
CEAM	Administrations General Public Scientific community	12 th -13 th - December 2017	Urban air pollution: LIFE+RESPIRA Final meeting, Pamplona-Spain
CEAM	Administrations General Public Scientific community	21 st March 2018	NOx reduction by photocatalytics. LIFE- MINOX-Street Final meeting, Madrid-Spain
CEAM	General Public Scientific Community	12 th -16 th March 2018	Air Quality Science and Application Barcelona
CEAM	General Public Scientific community	April 2019 and 2020	European Geoscience Union, Viena

Publications

Now that the project has been completed and all the results of the project have been analyzed, the partners are preparing various articles for publication in scientific journals.



Innovation

From the different contacts with stakeholders throughout the project, a number of industries have shown their interest in the photocatalytic textiles. These links, together with those created as a result of the dissemination activities carried out in the next conferences and fairs will be exploited in the future.

Social Media

The project has been disseminated in one important social media (Facebook) and every activity has been spread in a coordinated twitter account (@CEAM_Meteo). During the next years, both will be periodically updated with news or events related to the PHOTOCITYTEX project.

Online information tool

The online information tool developed for citizens, technicians and Public Administrations will be available in the web for a minimum of five years. The tool evaluates in an approximate and simple way the decontaminating effect that these textiles would produce in a real urban environment under different environmental conditions (season, solar radiation and relative humidity). This tool is available at <http://photocitytex.eu/>

Additional products of the Project

An additional outcome of the project was the development of a system integrating small sensors for the characterization of the air pollutants. The system, which is currently installed in a location in the city center of Valencia, is aimed at being replicated to build a network for air quality purposes. The system has a label of the LIFE program in a visible side, and in any data generated by this means the project will be acknowledged for the following 5 years.

Networking

The contact established with different projects (CAPTOR, RESPIRA, TECNARIA, etc) will be continued during the next years with the purpose of knowledge exchange and collaborations in new projects in the ambit of the air quality, depollution, photocatalytic textiles, etc.



Project Website

During the development of the project, the PHOTOCITYTEX website (<http://www.ceam.es/PHOTOCITYTEX/home.htm>) has been set up and updated with relevant information and news. Maintenance is planned over the next five years and all the online versions of project information resources: leaflet, notice-boards, newsletters, Layman's report, informative video, will be available for download. In general, information about all the dissemination activities already done and programmed in the future will be available and updated.



The project partners will periodically update the web portal with any news, events or activities related to the Photocitytex project or its objectives: air-quality, photocatalytic depollution, textile, etc., being a central hub for project-related information, which will be available to target wider audiences.

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