



*The **CRE**ation of the Department of Physical Chemistry of Biological Sys**TE**ms [CREATE]*

666295 — CREATE — H2020-WIDESPREAD-2014-2015/H2020-WIDESPREAD-2014-2

2nd Report on promotion of visibility & excellence

[Deliverable D.6.6]

Level of dissemination: Public

Warsaw, March 2021



This project has received funding from the *European Union's Horizon 2020 research and innovation programme* under grant agreement No 666295

TABLE OF CONTENTS

1.	Introduction	3
2.	Promotion of visibility & excellence	3
2.1	Organization of local events.....	3
2.2	Scientific CHAIRS.....	5
2.3	Conference “Where biology meets physical chemistry and business”	5
2.4	Press notes and information releases.....	6
2.5	Others.....	7

1. Introduction

This document specifies activities aimed at the promotion of the new Department and new specialisation at IPC, such as:

- the organisation of local events,
- scientific CHAIRS,
- conference "Where biology meets physical chemistry and business",
- press notes and information releases.

2. Promotion of visibility & excellence

2.1 The organisation of local events

➤ Open Days in IPC

The Open Days in Physical Optics and Biophotonics group [headed by Prof. Wojtkowski] was organised to promote the new Department, new specialisation, and the IPC PAS.

On October 21, 2019, Prof. Wojtkowski and his POB team hosted about 30 people in their laboratory. Members of the POB group talked about their work, problems and performed some laboratory demonstrations. Participants had the possibility to see unique research equipment and learn more about the results that can be obtained through its use. Dr Kornaszewski, a POB group member, explained what tests are carried out and how particular equipment works. Thanks to this, young visitors could see scientists working "in their natural environment". Participants could also manipulate some optical elements and build - with their own hands - simple optical systems.



➤ Popular Science Lectures

The cycle of Popular Science Lectures (initiated in the previous reporting period, that is, before M41) proved to be so popular that we decided to include them into our regular offer.

The lecture "Gases, liquids, solids" with experiments and hands-on activities (lecturer - dr Roman Luboradzki) was dedicated to Secondary Schools and High Schools students. During 19 lessons [which took place in the period between M41 – M66] we hosted about 600 students.

Additionally, the lesson entitled **"How physicist and chemist look at life - what for a biologist needs physicochemistry?"** was delivered two times. The lesson was shown for the first time as part of the 21. Science Festival in 2018 and now is a part of IPC regular educational activities. The scenario was created in co-operation with prof. Wojtkowski group and contains some of their research results.



Due to the pandemic, Popular Science Lectures could not be continued in their previous form. To not lose contact with young listeners, **we decided to record educational films and present them on our YouTube channel**. We have recorded the following lectures

- **"Crown ethers"** (<https://www.youtube.com/watch?v=40scozi8sIE&t=97s>)
How much can chemical molecules self-assemble? How many complex structures can they create? Can they gain new properties by creating complexes? These questions are answered by supramolecular chemistry, a branch of chemistry that began in the 1960s with the discovery of crown ethers. The video "crown ethers" shows the ability of this class of compounds to form complexes with alkali metals.
- **"Spontaneous combustion"** (<https://www.youtube.com/watch?v=cwzOU0IqYU4&t=12s>)
Fire, explosions, colour changes, unusual substances - this attracts young people to chemistry and physics. Only after that can we talk to them about thermodynamics, reaction mechanisms, or spectroscopy. The video "spontaneous combustion" shows five ways to get fire without matches, just by mixing different chemicals. In some cases, even ice may be used as an igniter.
- **"Carbon dioxide and greenhouse effect"** (<https://www.youtube.com/watch?v=pTcTJu6K4Lk>)
You don't have to be a climatologist to see the effect of adding carbon dioxide to the atmosphere. We show a simple experiment that anyone can carry out. We are not explaining WHY CO₂ is a greenhouse gas, we just show IT IS – two minutes to convince the unconvinced. The video "carbon dioxide and greenhouse effect" does not show theory, graphs or equations.. In this video, you can see with your own eyes that CO₂ is a greenhouse gas.

2.2 Scientific CHAIRS

A promotional film on the CREATE project was published in September 2019.

How light affects humans? How we perceive it and react to it? How one can conquer and harness the light to work for us and make our life longer, better. The ERA Chair holder and his team members talk about their light related fascinations, research, and new challenges.



It was displayed during different events, including IPC seminars, symposia and during the breaks of the conference "Where biology meets physical chemistry and business".

The full film has been deposited at our YouTube channel:

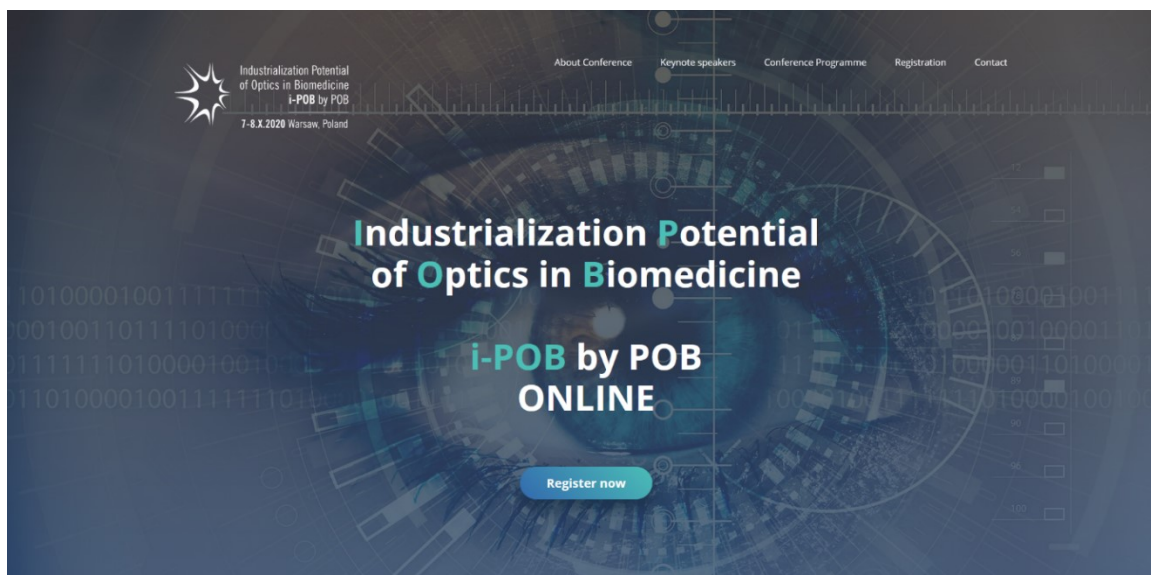
https://www.youtube.com/watch?v=sgsNGPhYV_I

2.3 Conference "Where biology meets physical chemistry and business"

The conference entitled "Industrialization Potential of Optics in Biomedicine" was organised to promote the new ERA Chair of IPC, its expertise and excellence, and to increase the new Department's visibility and new specialisation. The conference took place on the 7th and 8th of October, 2020, and due to the pandemic, the event had an online form.

All lectures and talks were broadcast via the conference channel (Pine conference platform) and streamed live on YouTube and FB.

To promote this event, we have designed and launched a conference website - <http://i-pob.edu.pl/>. The webpage contained all information related to the event, incl. description of the conference, keynote speakers specification, conference programme, information on how to register to the event.



The conference focused on the past, current and future developments of optical biomedical imaging techniques. The i-POB conference programme provided an opportunity to share the experience and tribulations of taking discovery to the global market, successfully implementing new technologies and running the high-tech company. It provided a platform for interaction between scientist, innovators and entrepreneurs. It was especially instructive for junior researchers and inventors interested in the development of novel imaging technologies. On the second day we also organised a poster session to stimulate development of young scientists. The best posters were awarded with diploma and an offer to join the ERA Chair for internships.

The video reportage from the i-POB conference is available on the IPC YouTube channel: https://www.youtube.com/watch?v=uT95u_Svkk

Full conference recordings are available here:

Day 1 – <https://www.youtube.com/watch?v=IxQWSGfwRgo&t=2256s>

Day 2 – <https://www.youtube.com/watch?v=iaok1UukKVw&t=6s>

2.4 Press notes and information releases

Press notes are an effective way to disseminate the project's results and arousing the interest of various target groups. In the period between M41 – M66, the following press articles have been prepared and published at the CREATE project, IPC, Alpha Galileo and/or EurekAlert! websites, as well as Facebook:

- [SERSitive: New substrates make it possible to routinely detect one molecule in a million](#)
- [NCP WIDE.NET Bulletin about CREATE](#)
- [Cells: live stream](#)
- [The CREATE project presentation at NCP in Warsaw](#)
- [CREATE among most recent success stories on DG Research and Innovation portal](#)

- *To see the Invisible*
- *Look into the mirror*
- *Industrialisation Potential of Optics in Biomedicine conference*

The purpose of publishing all the above-mentioned articles was to:

- promote the CREATE project,
- promote the ERA Chair holder and his teams,
- promote the new specialisation,
- spread information on the conference organised under CREATE.

Moreover, three articles promoting the CREATE project were published on the external websites:

- **"ERA Chairs: where innovation is CREATED" at NCP_WIDE.NET Bulletin**
https://www.ncpwidenet.eu/wp-content/uploads/2021/01/NWN_Bulletin-5edition_May-2019.pdf
- **"Keeping a closer eye on non-invasive microscopic bio-imaging" at DG Research and Innovation, EU**
https://ec.europa.eu/research/infocentre/article_en.cfm?artid=50685
- **CZELO Brochure: Good Practice Examples of H2020 Projects in Visegrad countries**
<https://czelo.tc.cz/en/we-recommended/czelo-brochure-good-practice-examples-of-h2020-projects-in>

2.5 Others

- **Interview with professor Maciej Wojtkowski – 1st Programme of the Polish Radio (20 Febr., 2019)**

The image shows a screenshot of the Polish Radio website (PolskieRadio.pl) and its audio player. The website header includes the logo and navigation tabs for various radio stations. The main content area features a news article titled "Nowe terapie i sposoby diagnozowania wad wzroku (Wieczór odkrywców/Jedynka)" with a duration of 20:56. The article includes a photo of a person's eye being examined. The audio player on the right shows the same title and duration, with a play button and a progress bar.