



# NEWSLETTER 3 / 2021

September 30, 2021

**Dear Partner,**

The summertime is over! We are all back at work and, as we see, our dear clients as well! We are happy to share a recent update from Solaris Optics!

We cover the following topics:

- Covid19 situation in Poland – update as of September 30, 2021
- Developments in Solaris Optics (investments, capacity)
- Employees – competence development and key employee presentation
- New publications on our website

Have a good read and beautiful autumn!

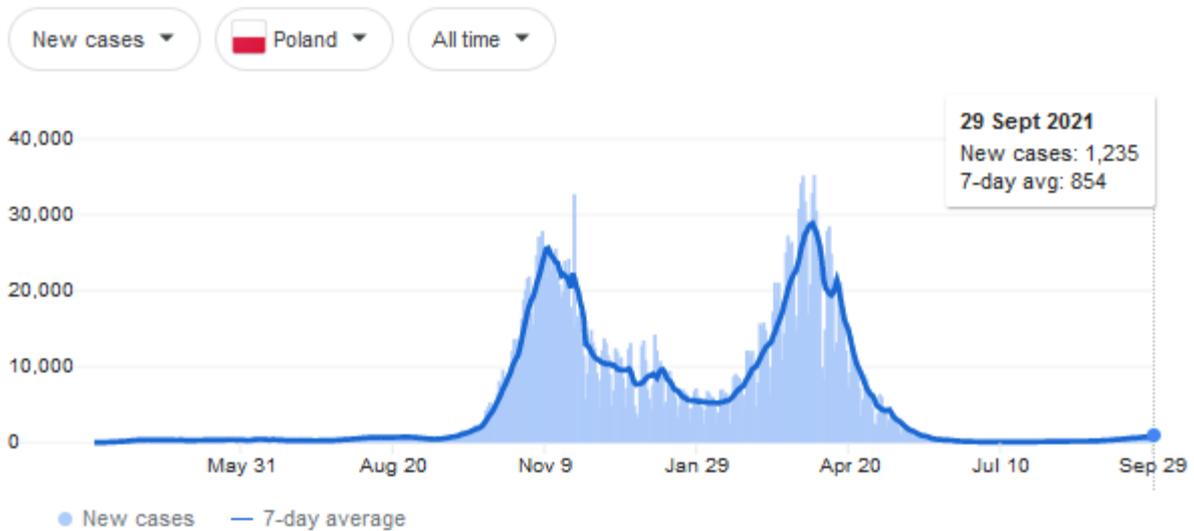
---

## COVID 19 IN POLAND

The summer season has been calm. The requirement of wearing a mask in closed spaces, as well as certain limits in a number of persons in closed premises remain in force, however people got used to it and everyday life has been going normally. Poland avoided the infections peak from the end of August/start of September, which was observed in some western European countries. Nevertheless the numbers started to grow in recent days and exceeded 1000 daily infections, which according to some experts, implies the start of the fourth coronavirus wave in Poland. We will keep you posted!

## New cases and deaths

From [JHU CSSE COVID-19 Data](#) · Last updated: 2 days ago



## DEVELOPMENTS IN SOLARIS OPTICS

### Investments in Optical Contact Bonding – Ultrasonic Cleaners

As a part of contact bonding technology development, till the end of 2021 Solaris Optics plans to purchase ultrasonic cleaners.

Ultrasonic cleaners allow for a very thorough removal of contamination from the surface of precise optical elements. They work by inducing high-frequency sound waves propagating in the liquids in which the washed elements are immersed. This leads to the alternating formation and implosion of cavitation bubbles. The mechanical energy released during the implosion supports the pollutant removal process. Solaris Optics will use a line of ultrasonic cleaners to prepare surfaces of optical elements for the optical contact bonding process. With such a process, it will be possible to increase the strength of the contact bonding.

### Increasing capacity

As a result of increasing market demand, Solaris Optics plans to increase its production capacity by 40% from December 2021.

## EMPLOYEES, COMPETENCES DEVELOPMENT & KEY EMPLOYEE

### Academy of Innovation Managers – Industry 4.0

Solaris Optics has successfully applied for the Academy of Innovation Managers (AMI), a PARP (Polish Agency for Enterprise Development) co-founded competence development programme for enterprises.

AMI's goal is the development of innovation process management skills by managers in Polish companies, as well as generating innovation by employees.

Three Solaris Optics management-level employees will participate in the 9-month lasting programme. The Academy covers the area of innovation management split into 6 thematical areas: innovation culture, business understanding, strategy, organizational structure, potential and resources, processes.

### Protection of Classified Information

Due to participation in defence-related projects, we are implementing a system and train employees for the protection of classified information.

### New Recruitments!

We continue to look for two **R&D engineers** (R&D Engineer, Senior R&D Engineer) to join our R&D Team, led by Jerzy Krężel, R&D Manager. Experience in optics highly appreciated! Please do not hesitate to share this info with potentially interested professionals! More <https://solarisoptics.eu/career/>

### KEY EMPLOYEE STAGE: Ms Monika Rżysko, Operations Director at Solaris Optics

*In the Key Employee Stage, we introduce our colleagues by presenting their professional bio and asking 3 questions. We start with our Operations Director, Ms Monika Rżysko.*

#### Professional Bio

**Ms Monika Rżysko** for over 2 years is responsible for Solaris Optics production operations. Monika started as a Production Manager to get quickly promoted to the position of Operations Director.

Monika, M.Sc. Eng, is a graduate of Chemical and Process Engineering at Warsaw University of Technology, Poland top-rated technical university. As the Operations Director, she brings 20 years of experience in managing manufacturing departments in, among others, Henkel, Soraya (Polish leading



*Figure 1 Ms Monika Rżysko, Operations Director, Solaris Optics*

cosmetics brand), Essilor Optical Laboratory and Arcade Beauty. Monika completed also an international management development program (Essec Business School) and a project management course (Kozminski University).

She belongs to the group of Solaris Optics managers participating in the Academy of Innovation Managers.

Colleagues find Monika as a management talent and an open-minded person, who brings many new improvement ideas to the Solaris Optics production operations.

#### INTERVIEW with Monika Rżysko

##### ***Monika, could you please describe, what is your existing role in Solaris Optics?***

I would split my tasks into four main groups. Firstly, I coordinate operational tasks in the areas of logistics, technology, planning, production, quality control and maintenance, which boil down to one goal, i.e. delivering orders to customers in accordance with their requirements in the shortest time and in the best quality. Secondly, I take care of the competence development of my team. Quite much time I allocate also to responding to customer inquiries and problems. The last duty is the analysis of KPIs.

##### ***How would you compare everyday work in custom optics manufacturing environment, including glass processing, thin films, interferometry to FMCG manufacturing, such as in cosmetics?***

Production management is in many ways similar for both branches, for instance, the variety of products and the need to focus on many processes (manufacturing, quality control, logistics etc.) are the same. Both cosmetics and optics require also cleanliness in production. Perhaps the requirements for production environment cleanliness in cosmetics are higher, but in general, the rules of the General Manufacturing Practice can be applied also in optics.

Nevertheless, there are differences, naturally! Cosmetics manufacturing always runs in big volumes, in a very repetitive process. In Solaris Optics the orders are more **specialized, sophisticated and require flexibility**. In optics, such as in Solaris Optics, we are more in a laboratory process rather than in a volume factory. The approach is always individual and also the care for quality looks differently - in FMCG you care about the process set up, so that the human factor is minimized. The process runs and the product quality is controlled by checking samples. In custom optics manufacturing the product quality very much depends on personnel qualifications - their specialization, flexibility and experience. We have specialized machines, that need to be set up for each product and require high competencies to both set up and operate. Quality control in optical component manufacturing is also different, for instance, the polishing operation can be paused every hour or two hours, to make interferometric measurements.

##### ***How do you relax after work, on weekends? Do you have a hobby?***

This sounds very standard, but I **eagerly travel**. I mean mainly long journeys, but recently, due to the pandemic, I turn to more local destinations. For instance, I have a tradition with my son, to visit and spend a few days in a cool city in Europe each year. We visited

this way Barcelona, Rome, Prague, Munich and Amsterdam, to name a few. In the pandemic, foreign trips are a bit more difficult so we travel to Polish cities, such as to my beloved Wrocław, Gdańsk, Kraków or Jelenia Góra. Lately, we have visited Masuria, known for its 2000 lakes.

---

## NEW PUBLICATIONS

In the last quarter, we continued the topic of Pockels cells, with an exclusive interview about Pockels cells technology with **our co-founder, Mr Ryszard Wodnicki**, PhD, Eng. We also aim to rivet your attention to our skills within thin films technology, by covering the topic of linear variable filters in 2 separate articles, including a Premiere publication in this Newsletter! Have a good read!

- [Pockels Cells – Design, Manufacturing, Selection](#) – Interview with Mr Ryszard Wodnicki, PhD Eng, co-founder of Solaris Optics
- [Linear Variable Filters – Types and Applications](#) – Solaris Optics
- [Basic crystals for Pockels Cells – KDDP, LiNbO3, BBO, RT](#) – Solaris Optics
- Linear Variable Filters – Technology – Solaris Optics (below!)

Please follow us in our social media channels at [LinkedIn](#) and [Facebook](#)!

---

## Pre-publication Premiere

### LINEAR VARIABLE FILTERS – TECHNOLOGY & USER PERSPECTIVE



Linear variable filters are special types of filters where spectral response changes along the filter physical position. The main benefit of a LVF is that a single filter can provide characteristics of many filters or can simplify mechanical design when replacing diffraction gratings.

The focus of this article is to familiarize the reader with linear variable filters technology – design, manufacturing, as well as with advise from user perspective.

[Read full article here!](#)

Please do not hesitate to [contact us](#) if questions!



Solaris Optics SA, Jana Sobieskiego 49, 05-410, Józefów, Poland