

## D2.1 Industrial Liaison Officer trained

Project acronym: Sylinda

Project full title: Synchrotron Light Industry Applications

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<b>RE</b>	Restricted to a group specified by the consortium (including Commission Services)	
<b>CO</b>	Confidential, only for members of the consortium (including Commission Services)	

### Document History

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## 1 Introduction

This report describes the actions undertaken within the framework of the Sylinda project, in order to train the Industry Liaison Officer (ILO) at SOLARIS in skills related to conducting effective cooperation of research institutions, especially synchrotron radiation facilities, with industrial partners, and to provide necessary resources for enhancing the potential of SOLARIS in industry cooperation.

The work presented here corresponds to Task 1.2. This deliverable describes the actions related to the training of the Industry Liaison Officer and its effects on the development of the industry cooperation capabilities at SOLARIS.

Due to the ongoing COVID-19 pandemic and in-line with the decision of the Project officer, the format of the training of the Industry Liaison Officer was changed from in-person to hybrid, and its completion date was postponed as compared to the initial proposal. Industry Liaison Officer held regular online training meetings with the representatives of project partners, especially during the first reporting period of the project. These meetings formed a solid background for the development of the Industry Cooperation Strategy at SOLARIS (D1.1). The ongoing contacts of the ILO with industrial partners and first customers have contributed to the development of the necessary skillset and expansion of the network of contacts. These actions were complemented by the in-person training of ILO by the project partners: ALBA Synchrotron and Hochschule Niederrhein, as well as Science Management Summer School, which concluded the training.

## **2 Motivation and goals**

In order to ensure effective cooperation with industry partners, and to fully utilize the potential of the newly opened Astra beamline and, in the long term, also the rest of the beamlines, SOLARIS has developed cooperation structures, centered around a newly appointed Industry Liaison Officer (ILO) and the Beamline Scientist (BS) responsible for the beamline. Cooperation with industry, however, requires a unique skill-set, combining strong technical and scientific background, familiarity with the industrial setting and the knowledge of the industrial problems, with communication, marketing and sales skills, as well as project and risk management.

Training of the ILO was aimed at providing them with theoretical and legal background, necessary skills, practical tools, and a network of contacts, necessary to effectively fulfil their role in the structure of SOLARIS and strengthen its capabilities. This leads to the widening of the technological and scientific capacity of SOLARIS, especially with regard to applied sciences and industry-relevant research, and expanding its user base. Additionally, it contributes to reinforcing the excellence of the services offered to the local, European and international industry, creating new, unique research & development possibilities, in particular for entities working with industrially-relevant low-Z elements, but also other industrial user profiles, and raising the profile of SOLARIS and its staff, especially with regard to applied research questions.

### 3 Description of the training – first phase

The first phase of the training of ILO was conducted remotely, through regular training meetings/sessions with the representatives of project partners, desk research, participation in various events, training sessions and conferences and guided interactions with first potential industrial customers.

Following representatives of the project partners were involved in the training of the ILO:

- Alejandro Sanchez (ALBA)
- Marta Ávila (ALBA)
- Josef Hormes (University of Bonn)
- Susanne von Ameln (Hochschule Niederrhein)

The training covered following topics:

- advantages for using synchrotron radiation for industrial research;
- proprietary access procedures at Alba;
- confidentiality and non-disclosure agreements signed with industrial partners;
- promotional activities, including organization of virtual workshops and industry days;
- pilot experiments for industrial partners and the pricing policy;
- pricing of data analysis and scientific support;
- differences between cooperating with SMEs and large companies;
- importance of rapid procedures and quick access to the beamlines;
- possibility of publicating results of industrial experiments;
- industry sectors interested in the applications of synchrotron radiation;
- in-situ/operando measurements for industrial applications;
- cooperation with scientists working in private sector;
- strengths and weaknesses of the offer of SOLARIS for industry;
- opportunities and threats faced by the industry cooperation programme at SOLARIS.

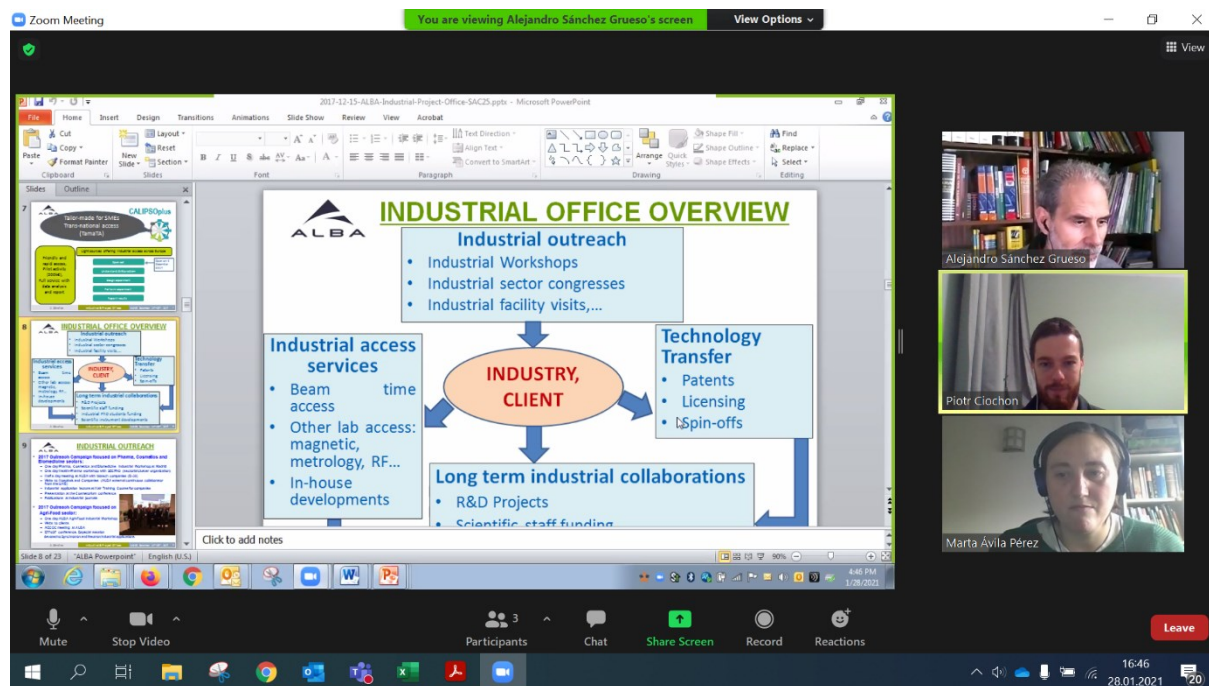


Figure 1: A screenshot of the first training session of the Industry Liaison Officer from SOLARIS at 28.01.2021

The training sessions were complimented by the first contacts of Industry Liaison Officer with industrial partners and organization of the first pilot experiment for the company operating in oil & gas industry in Poland at the ASTRA beamline. The Industry Liaison Officer was supported by the partners from the Alba synchrotron and Josef Hormes in organizing the pilot experiment, interpreting the initial results and continuing conversations with the first industrial partner.

The Industry Liaison Officer also participated in several conferences and meetings, learning about the activities of other light sources, promoting the services provided by SOLARIS, as well as in the networking meetings with the wider community of synchrotron radiation laboratories in Europe and worldwide. The examples include:

- InterNanoPoland conference (14-15.04.2021);
- Industrial workshop at Alba synchrotron (19.05.2021);
- Smart Agrifood Industry Expo (25-26.05.2021)
- The 18th International XAFS Conference (11-13.07.2021)
- Meetings of different working groups of LEAPS: League of European Accelerator-based Photon Sources

- Meetings of ENRIITC: European Network of Research Infrastructures and Industry for Collaboration, including #ENRIITCyourCoffee webinar series

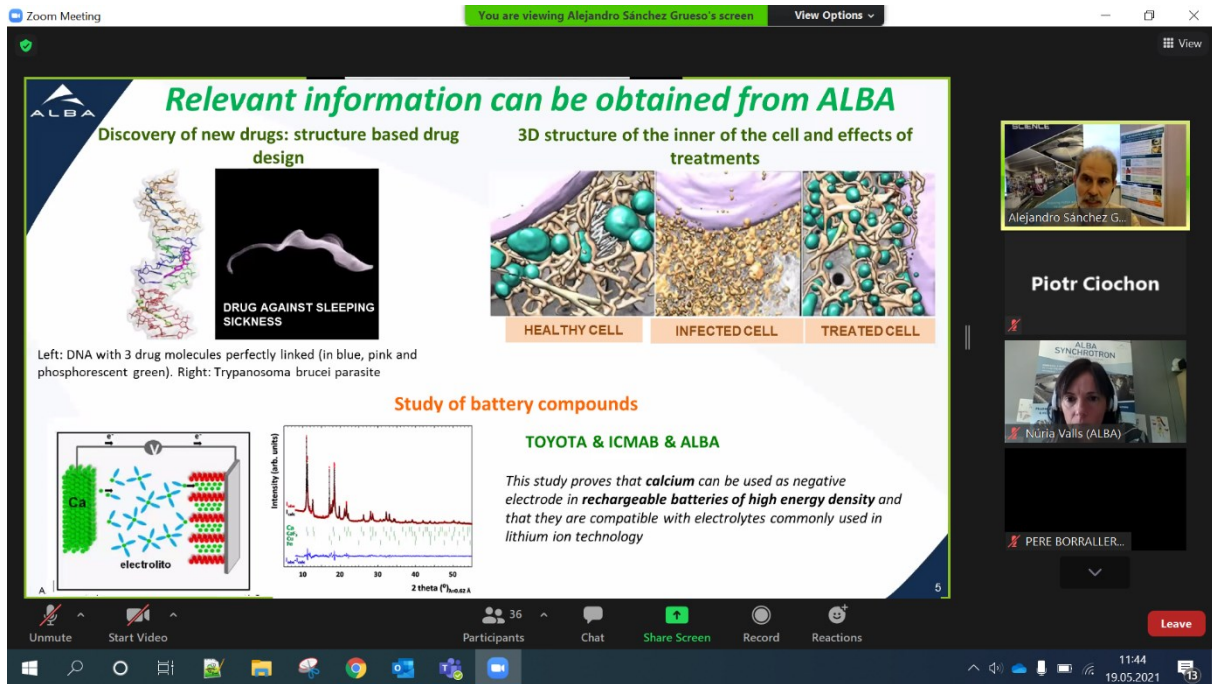


Figure 2: Screenshot from the online Industrial workshop at Alba synchrotron on 19.05.2021

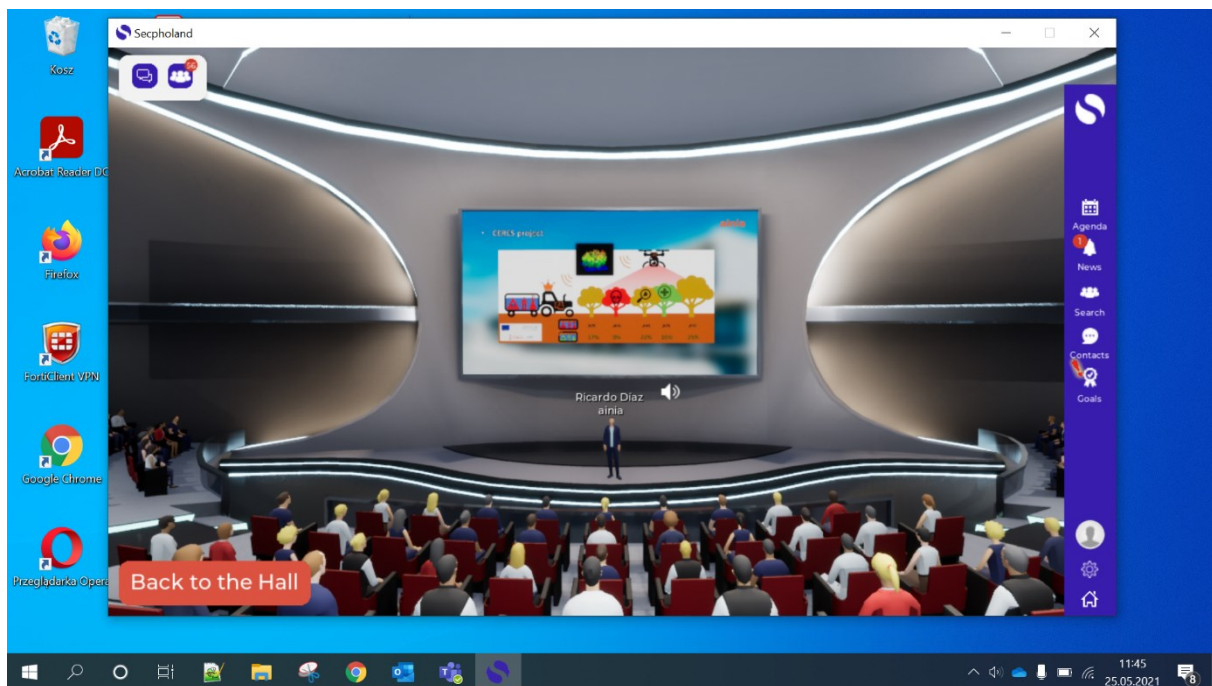


Figure 3: Screenshot from the online Smart Agrifood Industry Expo at the dedicated Secpholand platform on 25.05.2021



Online training sessions, combined with attended networking events, as well as desk research, studies of the profiles of other synchrotron radiation facilities worldwide and analysis of the external macro-factors affecting SOLARIS culminated in the creation of the first Industry Cooperation Strategy for the SOLARIS Centre. The strategy document, co-authored by: Piotr Ciochoń, Alejandro Sanchez, Marta Avila and Josef Hormes, with additional contributions from Alexey Maximenko, outlines the current status of the SOLARIS Centre, in terms of implementing an industry cooperation programme, sets goals to be achieved and outlines a strategic action plan for the next years. The document was validated with the consortium partners, as well as decision-makers at the SOLARIS Centre and forms a solid foundation for the development in this area. The strategy was submitted as D1.1: Industry Cooperation Strategy SOLARIS on 30.06.2021.

Sylinda – GA no. 952148

Industry Cooperation Strategy SOLARIS

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Figure 4: Table of contents of D1.1: Industry Cooperation Strategy SOLARIS

The first phase of the training of the ILO concluded on 31.03.2021

## 4 Description of the training – second phase

The second phase of the training of ILO was conducted in-person, during two intensive training visits of the ILO at Alba synchrotron and Hochschule Niederrhein, and complemented by online meetings, working with actual industrial partners, individual consultations and participation in conferences and events of the various organizations and associations.

In April 2022, Industry Liaison Officer from the SOLARIS Synchrotron undertook a month-long training visit in the Industry Liaison Office at Alba synchrotron. The length of the stay was shortened, as compared to the original proposal, because the first phase of the training was conducted remotely, due to the COVID-19 pandemic. The Officer participated in the day-to-day work of the Office and became acquainted with the techniques, used at Alba for the communication with industrial partners and customers acquisition. Because the initial training took place in 2021, in the form of regular teleconference meetings, the in-person stay at Alba was shortened with respect to the project proposal and its focus shifted to the exchange of experiences and best practices.

In addition to day-to-day cooperation, 10 training sessions with the employees of the Industrial Liaison Office were completed by the Industry Liaison Officer from SOLARIS. Following topics were covered during the training sessions, led by the Alba employees:

### **Marta Avila:**

- ALBA Synchrotron and ALBA beamlines (guided tour);
- Organization of industrial workshops and industrial webinars;
- Preparation of agreements with companies;
- Redaction and publishing of an industrial brochure;
- Presentations at fairs and congresses Chemistry/Material Sciences;
- Participation in sectorial clusters (Secpho and Secpholand);
- Organization of meetings with companies and company associations;
- Industrial experiments management and the involved processes;
- How to write an industrial report with the results obtained at ALBA;

- Writing industrial news;
- Scientific applications of XAS and SAXS/WAXS.

**Núria Valls:**

- Management of patents and utility models;
- Presentations at fairs and congresses Pharma/Life Sciences;
- TamaTA-Innov project;
- Examples of deliverables for a European project;
- Scientific applications of XRD and SR-IR;
- Contacts with the local area entities, such as: Sabadell/Cerdanyola councils (innovation departments), Biocat, sectorial clusters such as CataloniaBio;
- Contacts with other platforms/facilities/companies to provide a full service.

**Bárbara Calisto:**

- Participation and management of European projects;
- Coordination of international collaborations;
- Conferences organization;
- Customs clearance;
- Scientific applications of MX;
- Example of an industrial workshop: ALBA Safari Tech.

**Alejandro Sánchez:**

- ALBA organization;
- Collaboration with other synchrotron, industrial associations;
- Participation and management of European projects;
- Budget management/Incentives;
- Presentations at fairs and congresses (Aerospace/Automotive/Electronics).

The training was complemented by the dedicated visits at several beamlines at Alba and the discussions with beamline scientists, focused on the specific challenges of carrying out industry-relevant projects at the synchrotron radiation facility, as well as visits of the other

research & development institutes at the Universitat Autònoma de Barcelona campus. Specific cases of industry-relevant projects were discussed with beamline scientists and the advantages and disadvantages of the given methods were analyzed. Industry Liaison Officer from Solaris also participated in some activities related to the organization of the annual Industry Workshop organized by Alba for the pharmaceutical industry and exchanged information related to the newly-opened cryoEM facility at Alba synchrotron. He participated in the regular meeting of the Industry Liaison Office from Alba and discussed the implementation of the Customer Relationship Management software system at Solaris. He also participated in three events organized by the Industry Liaison Office at Alba: a visit of the ESADE Business School alumni on 21.04.2022, the visit of the representatives of the South American research institutes and universities, organized as part of the UA Summit 2022 on 26.04.2022 and Alba Safari Tech on 29.04.2022.

In November 2022, Industry Liaison Officer from the SOLARIS Synchrotron undertook a 9-day training visit in the in the Research and Transfer Department of Hochschule Niederrhein. Similarly to the training visit at Alba, because the first phase of the training took place in 2021, in the form of regular teleconference meetings, the in-person stay at Hochschule Niederrhein was shortened with respect to the project proposal and its focus shifted to the exchange of experiences and best practices, as well as training in the area of specific aspects related to working with industrial customers and IPR protection.

The ILO received training in the following areas:

- Specifics of applied research projects;
- Networking and establishing contacts with industrial partners;
- Intellectual property right, IPR management and protection;
- Research funding and innovation transfer;
- Challenges and opportunities in automation of large-scale facilities;

The training included two visits at large-scale research centers independent from Hochschule Niederrhein: Deutsches Elektronen-Synchrotron DESY in Hamburg, which is one of the leading accelerator centers in the world and operates, among other facilities, PETRA synchrotron light source and European X-ray Free Electron Laser facility (XFEL), and Karlsruhe Institute of Technology in Karlsruhe, one of the largest and most notable German institutes of technology, which operates, among other facilities, KARA synchrotron light source. The visits consisted of guided tours of the facilities and meetings with beamline

scientists, especially working with applied research projects relevant for the potential applications of Astra beamline for industrial customers. Additionally, a meeting was organized with the Innovation & Technology Transfer Department of DESY. During the meeting, the ILO from Solaris had the opportunity to gain valuable insights into the management of industrial collaborations and services at one of the most important large-scale facilities in Europe, and to expand his network. The contacts initiated with the Department, especially with Industry Relations Manager, Sabine Brock, will contribute to the successful implementation of the industry cooperation strategy at Solaris and its success in attracting industrial customers to the facility.

ILO was also trained in the intellectual property rights in a training session organized by Hochschule Niederrhein in the framework of the NRW Hochschul-IP community. The workshop was led by the experts from ProVendis GmbH and the ILO received a certificate confirming the participation in the training.



## Certificate of participation

Mr Piotr Ciochon

successfully participated in the web seminar

**Basics of Patent Law**

on November 23, 2022

within the framework of the qualification measures of the  
NRW Hochschul-IP network.

Content:

- What are the different types of intellectual property rights?
- Patentability requirements
- How a patent is structured
- Introduction to the patent application process
- What kind of protection patents offer

Muelheim an der Ruhr, November 23, 2022

Dr.-Ing. Heinrich Dornbusch  
Managing Director  
PROVendis GmbH

NRW Hochschul-IP – Network for Intellectual Property (IP) of NRW Universities  
28 universities of North Rhine-Westphalia and PROVendis GmbH form the network NRW Hochschul-IP. The network for Intellectual Property (IP) encourages professional knowledge and technology transfer. Together with the University of Münster (WWU) PROVendis acts as the central service provider for NRW Hochschul-IP. The network NRW Hochschul-IP is funded by the federal state of North Rhine-Westphalia. Grant authority is the Ministry of Economic Affairs, Innovation, Digitalization and Energy of the State of North Rhine-Westphalia.

About PROVendis  
PROVendis acts as a professional service provider in the entire field of IP management for more than 30 universities and extra-university research institutions as well as for companies and start-ups.

Figure 5: Certificate of participation of the ILO from Solaris in the workshop “Basics of Patent Law”

Additionally, the training of the ILO included meetings with Susanne von Ameln, Henning Lichtenberg, Jost Goettert and Markus Menkhaus, as well as the visit in the Institute for Surface Technology – HIT, where the ILO could learn about the automation of research facilities and the benefits it can bring to the industrial partners.

## **5 Summary and conclusions**

The Industry Liaison Officer has been successfully trained in the Sylinda network. The combination of remote meetings, in-person training visits, attendance of various workshops and events, cooperation with actual industrial partners, and other forms of training undertaken within the framework of the project, was effective in transferring the knowledge and skills necessary for future successful operation of the ILO at Solaris. The goals of the training have been achieved and it will contribute to the future success of Solaris in cooperating with industrial partners.

Trained ILO is ready to implement the industry cooperation strategy of Solaris and to conduct actions related to obtaining industrial customers and completing industrially-relevant experiments, especially at the Astra beamline and to apply all this experience to the rest of the beamlines, in order to provide the broadest possible set of services to the Industry. First industrial customers have already performed initial experiments at SOLARIS, which confirms the success of the training. A wide network of contacts, obtained during the training period, will be useful in realizing the goals of the project and ensuring its long-term sustainability.