



FLOIM

Flexible Optical Injection Moulding of optoelectronic devices

Grant agreement n°: 820661

Call identifier: H2020-NMBP-FOF-2018

Deliverable D8.8

FLOIM WORKSHOP

Work Package 8

DISSEMINATION, EXPLOITATION AND COMMUNICATION

Document type	: Report
Version	: V1.0
Date of issue	: 4 th August 2022
Dissemination level	: Confidential
Lead beneficiary	: AIMEN

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement n° 820661.



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Executive Summary

Within task T8.2, the consortium organised a final event in the Laser World of Photonics (WoP) fair that took place in München in April 2022. The aim of this workshop was to promote the dissemination and communication of FLOIM's results. During the event different seminars were imparted by several consortium partners in order to share their main advances and research outcomes.

This deliverable includes the event agenda together with images taken during the celebration of the workshop in order to illustrate it. In addition, small extracts from the imparted seminars are also included as an example of their content.

Contribution and revision history

Version	Author(s)	Changes	Date
V1.0	AIMEN	Final version to be submitted after the QCG revision	4/08/2022

This deliverable has been evaluated by the members of the Quality Control Group (QCG), following the procedure indicated in deliverable D9.1: Quality Assurance Plan.

Quality Control Group Member	Partner
Pablo Romero	AIMEN
Christian Rankl	RECENDT
Jan Edelmann	Fraunhofer
Mikel Gomez	CEIT

The final version of the document, after implementing the minor changes indicated in the individual evaluation of the QCG members, has been reviewed and approved for submission by the Project Coordinator.

Table of Contents

1	WORKSHOP VENUE.....	4
2	WORKSHOP AGENDA	6
3	WORKSHOP PROMOTING FLYER.....	7
4	WORKSHOP IMAGES	9

1 Workshop Venue

FLOIM has hosted the project final event (FLOIM Workshop) on April 28th at the World of Photonics Fair 2022 at München (Munich Messe).

Laser World of Photonics (WoP) is the world’s leading Trade Fair for Photonics, Components, Systems and Applications. WoP is a source of impetus and force that drives the Photonic-related markets. The fair provided a complete overview of all topics that pertain to photonics on 55,000 square meters of exhibition space and hosted 14,938 visitors (68% domestic, 38% international) from 71 countries and 906 exhibitors from 32 countries¹.

LASER WoP features a unique combination of research, innovative technology and industrial application sectors; and the entire range of solutions from components to systems. The supporting program includes educational forums, panels and exclusive roundtable discussions with prominent participants from all branches of industry.

The Lasers and Optoelectronics is the sector of highest interest for the visitors and the main areas of application during the fair are perfectly aligned with the main areas of application of FLOIM results, specifically, automotive and sensor technology, as represented in Figure 1.

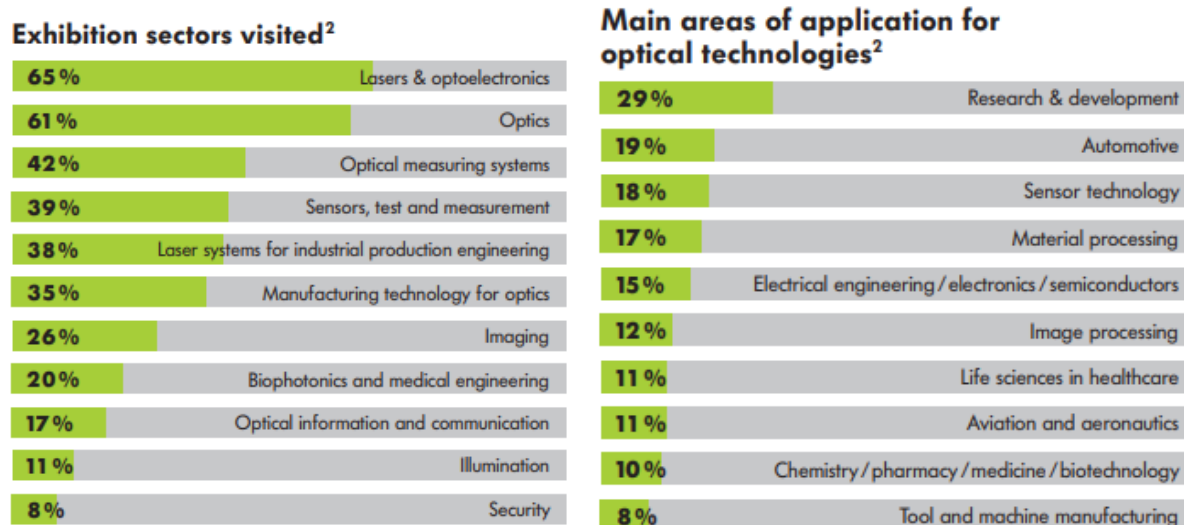


Figure 1. Exhibition sectors visited by the visitors and main areas of application for optical technologies².

Due to all the previously mentioned facts, the FLOIM consortium selected LASER WoP for showcasing the main technological advances achieved within the project, in the field of optoelectronics manufacturing by injection overmoulding.

¹ <https://world-of-photonics.com/en/about/information/facts-figures/>

² <https://world-of-photonics.com> → Working professionals only – without students /unemployed /retired visitors

AIMEN, as project coordinator, represented the consortium in one booth during the fair, where the information of FLOIM project was available both in terms of project communication material (Flyers, roll-up, etc.) and samples.



Figure 2. AIMEN's Booth at the LASER WoP as representation of FLOIM consortium.



Figure 3. Image of some samples and communication material exhibited during the fair.

2 Workshop Agenda

FLOIM final event has been organised aiming to promote the diffusion and communication of the project outcomes. In this regard, seminars were imparted by different members of the consortium, showing their main advances and highlighting their most remarkable results. A total of 6 different talks, by 5 project partners (AIMEN, RECENDT, ADAMA, CEIT and Fraunhofer IWU), were included in the workshop agenda.

The agenda also included some clustering activities with other projects, organized specifically for the event, with the main objective of increase the dissemination of the project results and to enhance the networking possibilities:

- Presentation of the PHABULOuS pilot line.
- Networking coffee with PULSATE project.

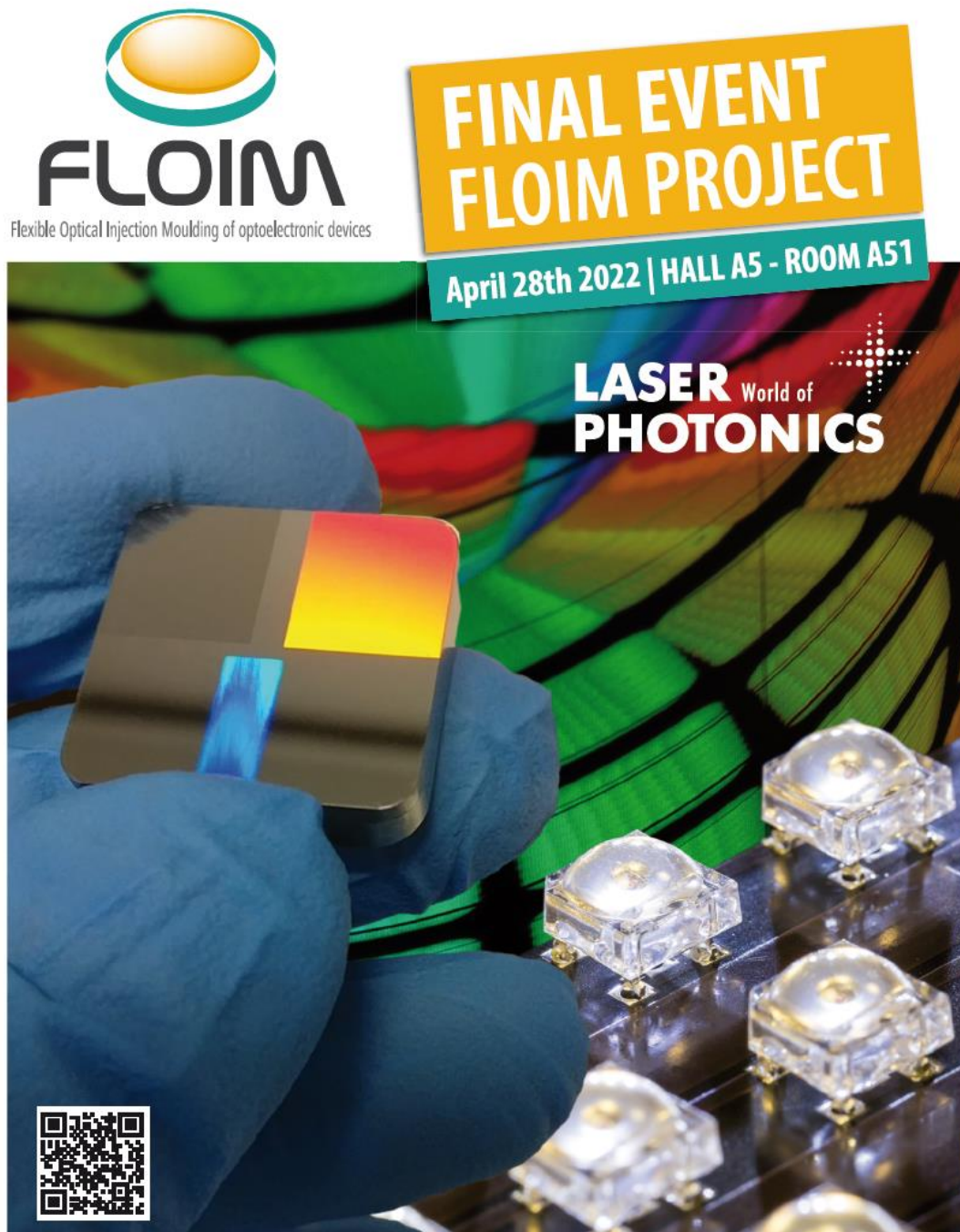
Table 1. FLOIM workshop agenda.

Event Agenda: 2022 - **April 28th**, Thursday: 9:30 – 11:30, **Hall A5, room A51**

START	TALK	PRESENTER
9:30	FLOIM: Flexible Optical Injection Moulding of optoelectronic devices	Nerea Otero - AIMEN
9:40	In-mould measurement for mechatronic compensation of positioning errors in injection overmoulding	Christian Rankl - RECENDT
9:55	Fiber-optic based metrology for nanometric measurement of micro-mould filling by a polymer	Majid Fazeli Jadidi - ADAMA
10:05	Femtosecond laser fabrication of volume and surface-relief micrometric phase gratings	Mikel Gómez Aranzadi - CEIT
10:20	Challenges in the machining of micro-optical mould inserts	Jan Edelmann - Fraunhofer IWU
10:35	High-performance DLC-based mould patterning technology with high control over micro and nano features	Zahra Gholamvand - ADAMA
10:45	European Pilot Line and one-stop-shop for free-form micro-optics	Jessica van Heck - Phabulous project
11:00	Networking coffee – Clustering with PULSATE Project	

3 Workshop promoting flyer

In order to promote the FLOIM event in the WoP fair, the following flyer was designed, printed and distributed:



ORGANISED BY



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FINAL EVENT FLOIM PROJECT

April 28th 2022 | HALL A5 - ROOM A51

AIMEN Technology Centre, as coordinator of the **FLOIM project**, is hosting an event presenting the last technological breakthroughs in injection moulding of optoelectronic devices. Come discuss about:

- In-mould error positioning compensation and nanometric mould filling sensors.
- Micro-optical mould inserts manufacturing by direct laser writing, machining, and DLC based patterning.
- One-stop-shop for free-form micro-optics.

DATE AND PLACE

April 28th 2022, from 9.30 to 11.30 hours.

Laser World of Photonics - Messe München - HALL A5 - room A51

PROGRAMME

9.30 to 9.40h	FLOIM: Flexible Optical Injection Moulding of optoelectronic devices AIMEN Technology Centre Nerea Otero
9.40 to 9.55h	In-mould measurement for mechatronic compensation of positioning errors in injection overmoulding RECENDT Christian Rankl
9.55 to 10.05h	Fiber-optic based metrology for nanometric measurement of micro-mould filling by a polymer ADAMA Majid Fazeli Jadidi
10.05 to 10.20h	Femtosecond laser fabrication of volume and surface-relief micrometric phase gratings CEIT Mikel Gómez Aranzadi
10.20 to 10.35h	Challenges in the machining of micro-optical mould inserts Fraunhofer IWU Jan Edelmann
10.35 to 10.45h	High-performance DLC-based mould patterning technology with high control over micro and nano features ADAMA Zahra Gholamvand
10.45 to 11.00h	European Pilot Line and one-stop-shop for free-form micro-optics PHABULOuS Pilot Line Association Jessica van Heck
11.00 to 11.30h	Networking coffee – Clustering with PULSATE Project

Figure 4. FLOIM's final event flyer.

4 Workshop images

In this section, images captured during the celebration of the event are included to illustrate it.



Figure 5. Image of the location of the FLOIM workshop in LASER WoP fair.



Figure 6. Image of FLOIM consortium members during FLOIM workshop in WoP.



Figure 7. Image taken during FLOIM's overview presentation and CEIT's seminar.



Figure 8. Images taken during ADAMA's seminar.



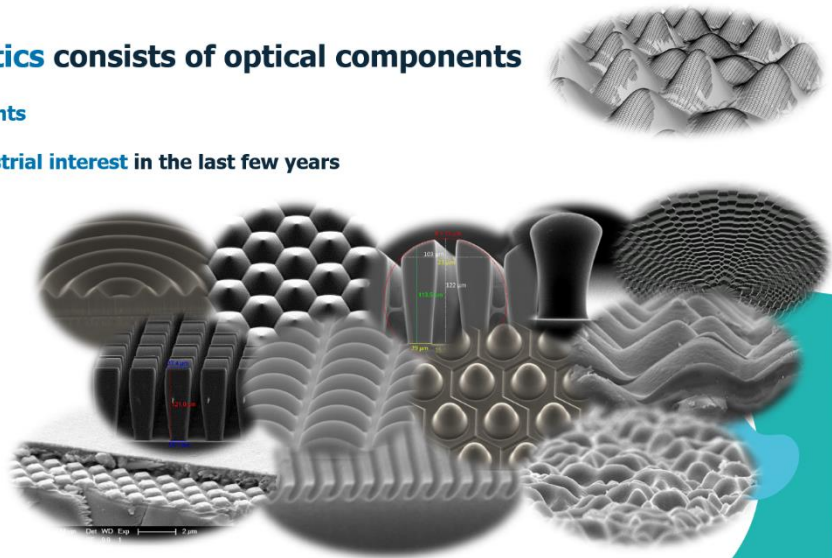
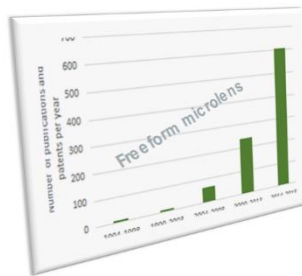
Figure 9. Image of some attenders to FLOIM workshop.

In addition, the event also included a presentation of PHABULOUS pilot line association, which has been recently consolidated and it is also related with micro-optic manufacturing. Thereby, this presentation implies a relevant clustering activity of FLOIM with other European collaborators.

Free-form micro-optics (FFMO)

Free-form micro-optics consists of optical components

- with no symmetry constraints
- gaining an increasing industrial interest in the last few years



« Marketplace »

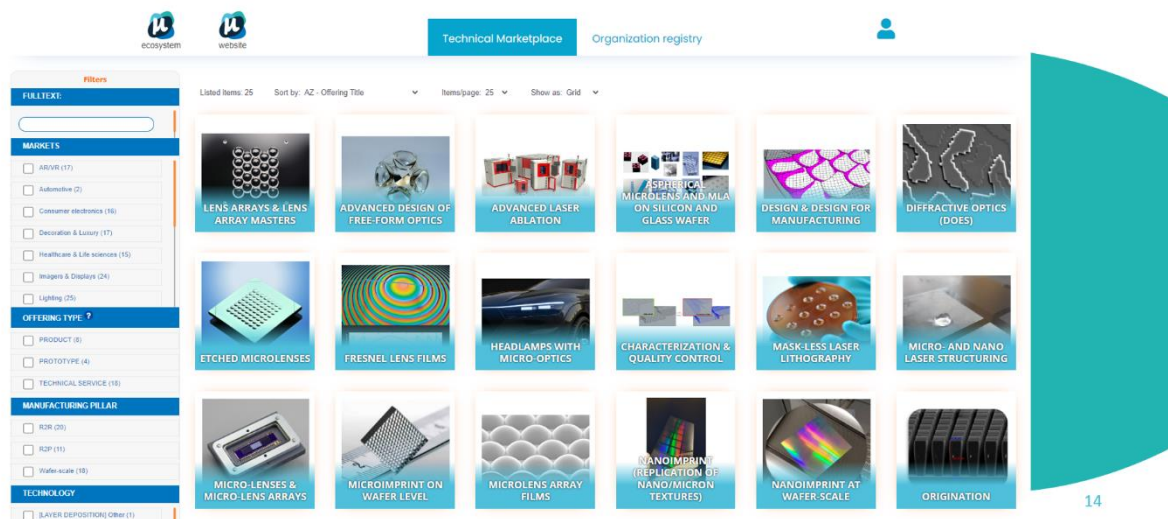


Figure 10. Extract from PHABULOUS Pilot line Association presentation, titled "European Pilot Line and one-stop-shop for free-form micro-optics".

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FLOIM project is an initiative of the Factories of the Future Public Private Partnership.



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