D9.6 – First report on MOLOKO dissemination and communication activities

Project Information

Grant Agreement Number	780839
Project Full Title	Multiplex phOtonic sensor for pLasmonic-based Online detection of contaminants in milK
Project Acronym	MOLOKO
Funding scheme	IA
Start date of the project	January 1st, 2018
Duration	42 months
Project Coordinator	Stefano TOFFANIN (CNR)
Project Website	http://www.moloko-project.eu

Deliverable Information

Deliverable n°	9.6
Deliverable title	First report on MOLOKO dissemination and communication activities
WP no.	WP9
WP Leader	QCL
Contributing Partners	BEWARRANT (BeWG)
Nature	Report
Authors	Stefania Melandri (BeWG), Lisa Bregoli (BeWG)
Contributors	Mark Whatton (QCL)
Reviewers	Stefano Toffanin (CNR)
Contractual Deadline	M18
Delivery date to EC	17-07-2019

Dissemination Level

PU	Public	**X**
PP	Restricted to other programme participants (incl. Commission Services)	
RE	Restricted to a group specified by the consortium (incl. Commission Services)	
CO	Confidential, only for the members of the consortium (incl. Commission Services)	

Document Log

Version	Date	Author	Description of Change
1.0	10/07/2019	Stefania Melandri	First draft
2.0	11/07/2019	Mark Whatton	WP Leader revision
3.0	15/07/2019	Stefano Toffanin	General overview and revision of the document for submission

Table of Contents

1 Executive Summary

Deliverable 9.6 is the first report about dissemination and communication activities carried out in the first 18 months of the MOLOKO project. Within this period, MOLOKO project submitted to the EC, on May 9th 2018, the initial Plan for Exploitation and Dissemination of Results (PEDR) in the deliverable "D9.1 PEDR", based on the draft described in the DoA.

The initial PEDR is divided into two sections, where section A is focused to the description of the dissemination plan (including an outline of the dissemination strategy and the Project Communication Plan), while section B described the initial exploitation plan (including also a chapter on IPR management).

In relation to the submitted version of the PEDR, we present below the updates about dissemination and communication activities up to Month 18.

2 MOLOKO website

MOLOKO website has been set up and descried in Deliverable 9.3. It can be considered as one of the most relevant dissemination tools to be used by the project consortium in order to reach a wide public and communicate project progress and results.

The website includes also a direct link to the MOLOKO Collaborative Platform, a private area to which only project partners have access.

The project website has been updated as required by the Project Officer during the 1st technical review made at M10. Partners' profile with related roles' in the project and pictures have been added in the dedicated section, and for each of them the main investigator has been indicated.
In addition, young students like researchers and PhDs working on the project have been added in their related organization page.

Three new sections have been added to the website during the first 18 months of the project:

- VIDEO: the project presentation video in English and Italian was published followed by interviews made by project partners at the M15 Internal Meeting where they explain their role in the project;
- FORESEEN IMPACTS: in this section details are given concerning the 5 points of the milk supply chain where MOLOKO sensor is expected to operate and how MOLOKO technology intend to solve the identified related problems;
- PUBLICATIONS: in this section project publications and press releases are constantly updated and listed.

MOLOKO presence on social media has been highlighted in the Homepage by adding the Facebook and Twitter feeds.

The website can be found in the following URL: http://www.moloko-project.eu

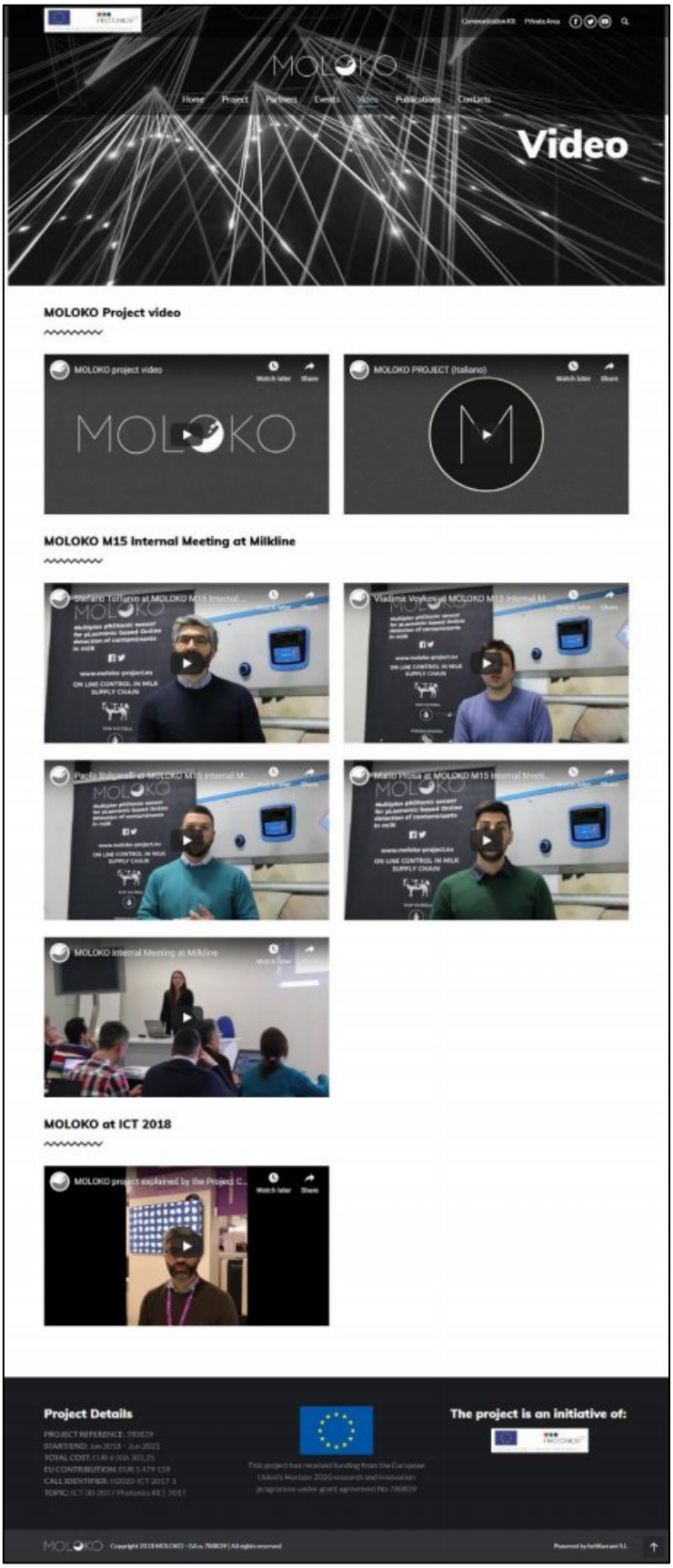

Figure 1 Video section

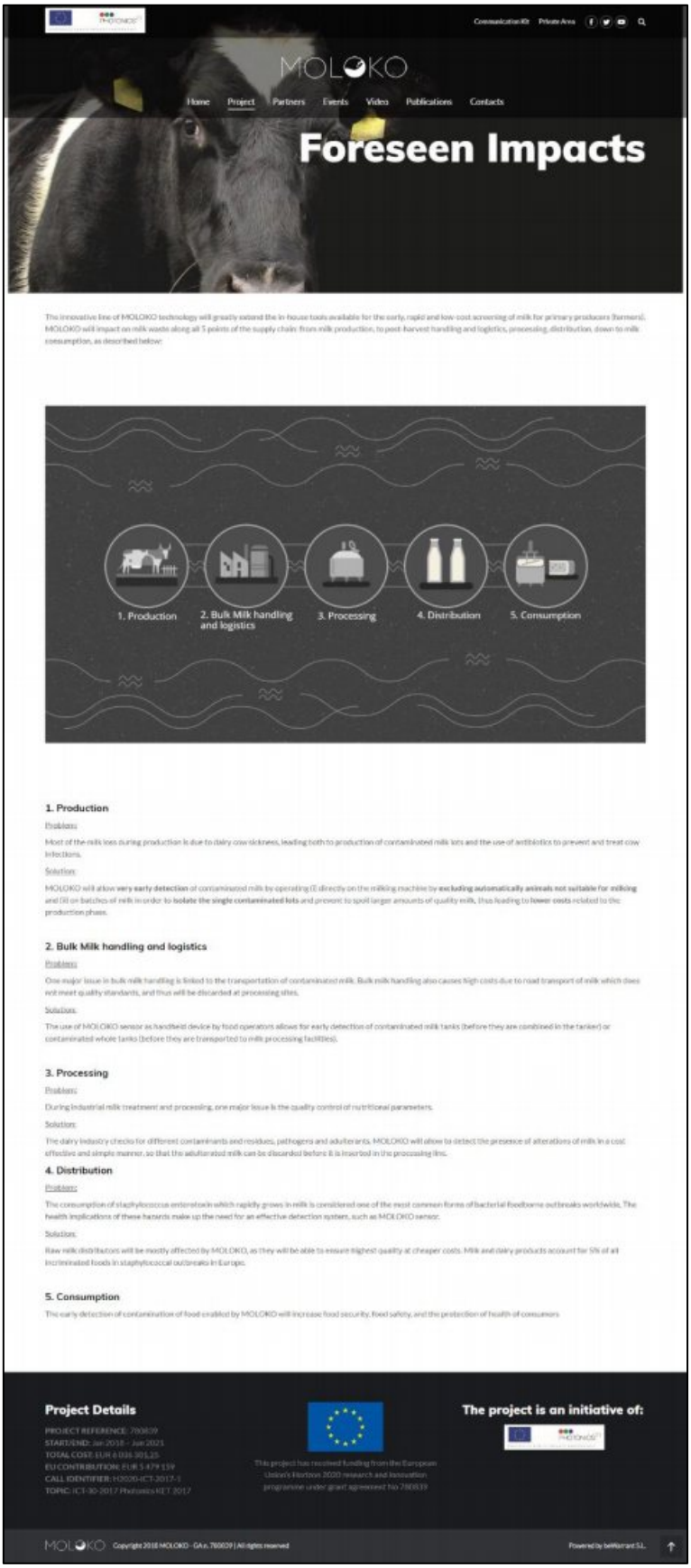

Figure 2 Foreseen Impacts' section

Figure 3 Publications' section

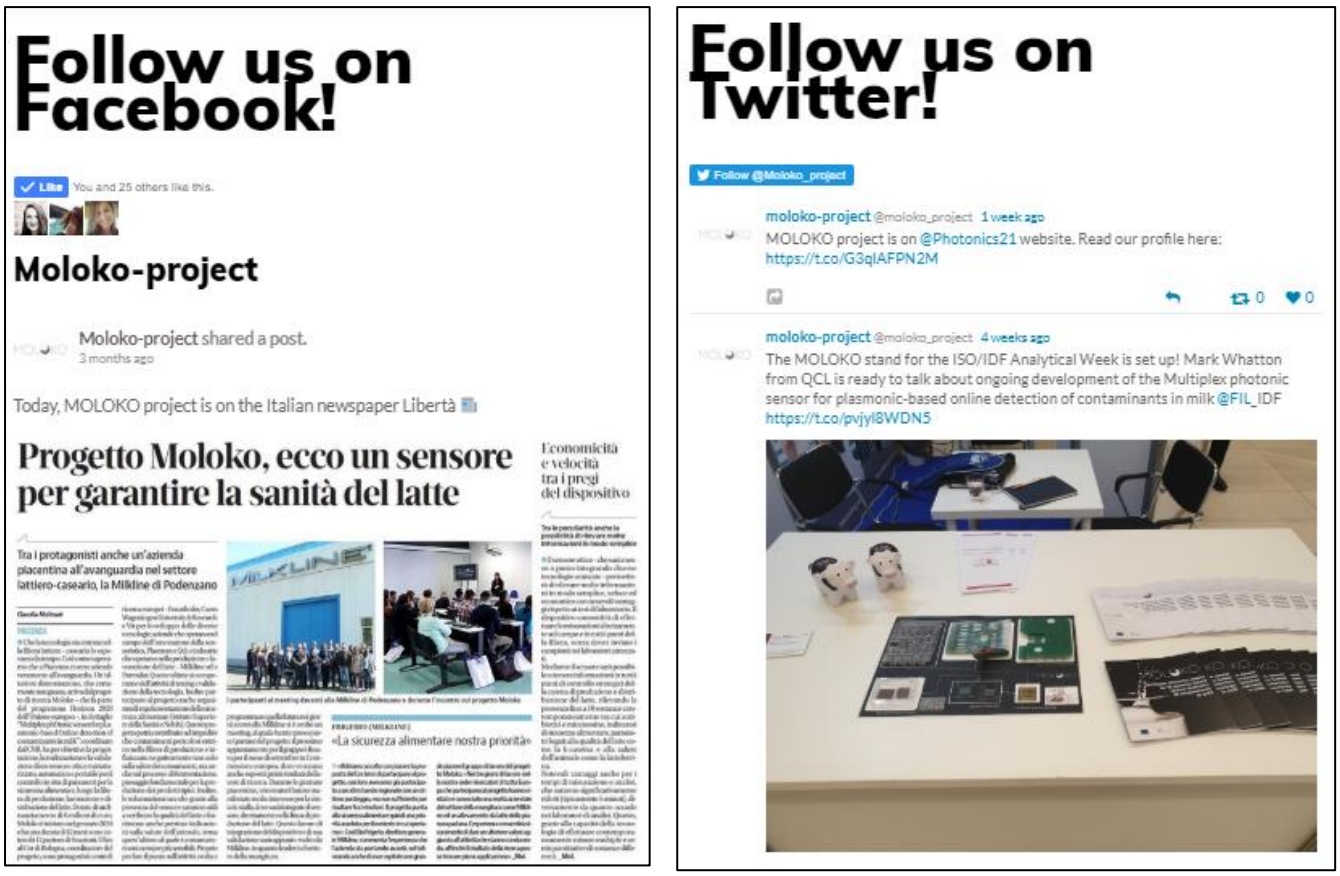

Figure 4 Facebook and Twitter feeds

3 MOLOKO Social Media

Three social media accounts have been created for MOLOKO: Facebook, Twitter and YouTube.

The website has direct access to these social networks by clicking over the icons situated on the bar at the beginning of the homepage or at the bottom. Therefore, it is easy for every user to participate in social events/updates/discussions when the website is visited.

3.1 Facebook

A Facebook page has been created to reach the general public and share project progress status.

Figure 5 Facebook page

3.2 Twitter

A Twitter account has been created as further and more instant dissemination instrument for reaching the general public. Twitter is the tool used by the Dissemination Manager to provide real-time information on the activities of individual partners in conferences, meetings, and other dissemination activities. Moreover, Twitter is used to share interesting news related to the Photonics and Electronics fields as well as news from official Twitter accounts of the European Commission (i.e. @Photonics21, @DigitalSingleMarket, @Electonicspec, etc..)

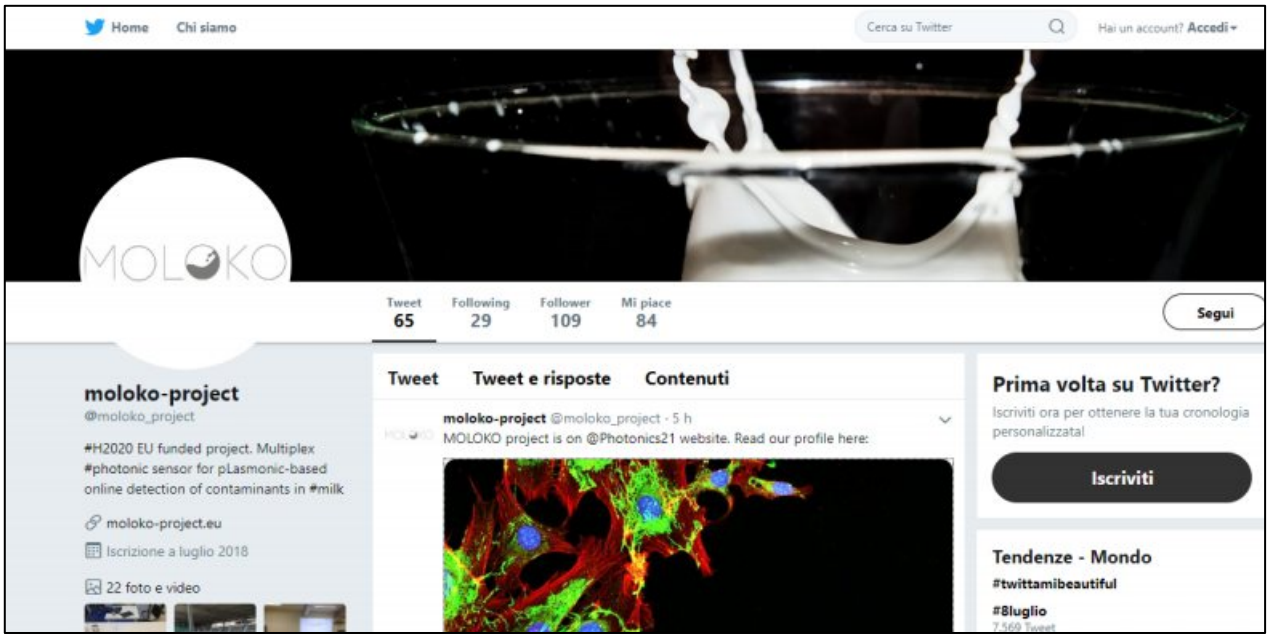

Figure 6 Twitter account

3.3 YouTube

A YouTube channel has been created as it gives MOLOKO project a powerful medium to produce and distribute video contents and engage a massive audience. The video that are uploaded to YouTube channel will be shared across MOLOKO other social channels as well and embed into the project website.

Firstly, in the YouTube channel the introductory video was published to highlight MOLOKO general overview. Secondly, some interviews have been recorded and published in the occasion of the M15 Internal Meeting where partners explained their role in the project in a more detailed way.

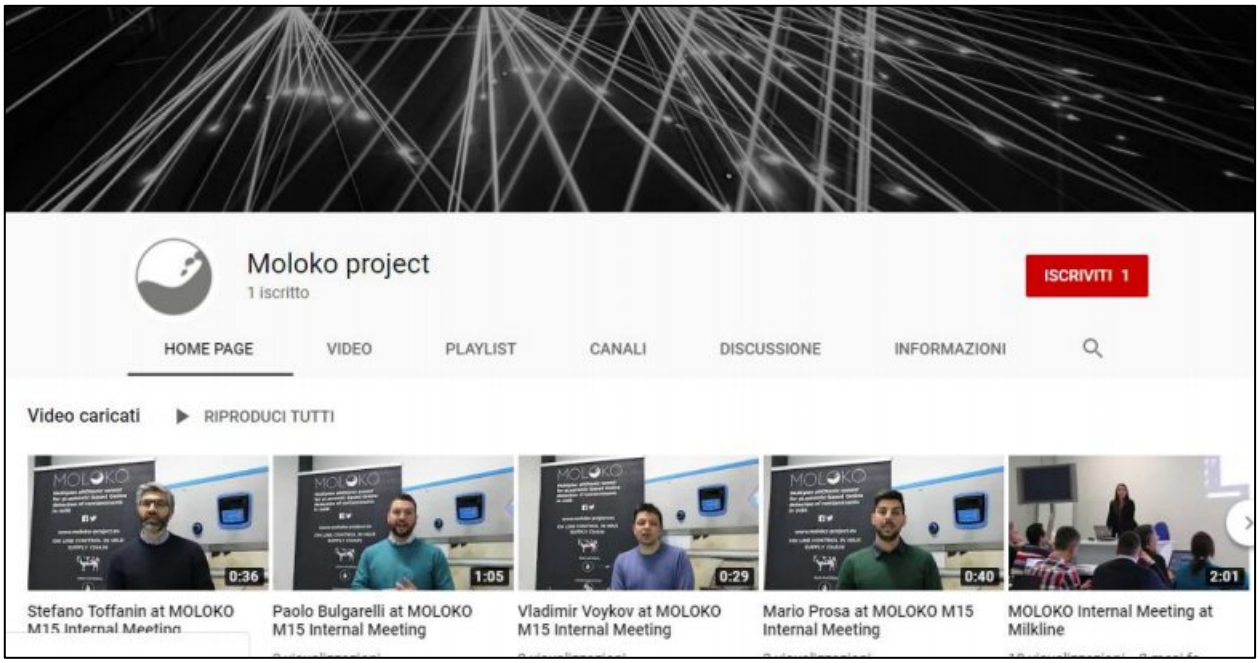

Figure 7 YouTube channel

4 MOLOKO Communication KIT

Deliverable 9.4 describes in detail the MOLOKO logo, brochure and flyer developed at the beginning of the project and available to all partners for dissemination and communication activities.

4.1 Logo

The logo was designed to help the external audience to easily identify MOLOKO project and contributes to the project visibility by providing a corporate identity from the very beginning of the project. Several versions of the logo were designed by BEWG and they were presented at the kick-off meeting. Each partner had the opportunity to choose the favourite one before the final approval.

Figure 8 MOLOKO logo official version

Figure 9 MOLOKO symbol official version

Figure 10 MOLOKO logo white version

Figure 11 MOLOKO symbol white version

4.2 Brochure

The MOLOKO brochure was designed to capture the attention of the different target groups and increase the awareness of the project. It was improved by Project Coordinator (CNR) and WP9 leader (QCL).
The scientific and technological contents reported in the brochure are generated, shared and validated by the entire Consortium, with attention paid to the intellectual property protection.

More than 200 copies have been printed and distributed to conferences, events and fairs (i.e ICT2018 in December 2018 in Wien) by BEWG, MILKLINE, PARMALAT, QCL, CNR and other project partners.

First release:

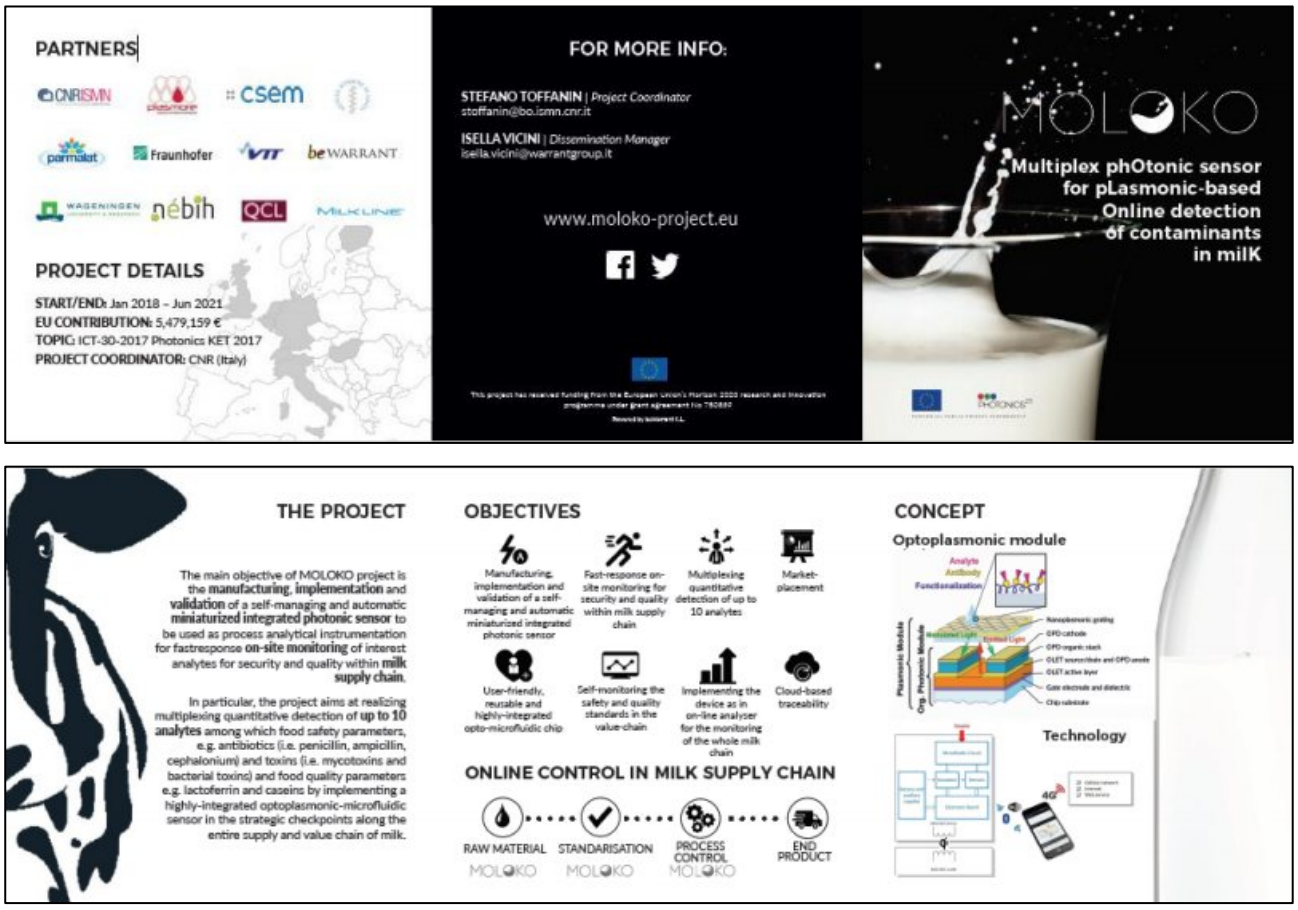

Figure 12 MOLOKO brochure

The MOLOKO brochure has been updated in May 2019 in order to give more technical details to interested stakeholders and companies about MOLOKO technological development and the type of analytes to be detected by MOLOKO sensor. The imprinting of this second brochure is more commercial-oriented and in this view the Exploitation Manager's contact has been indicated.

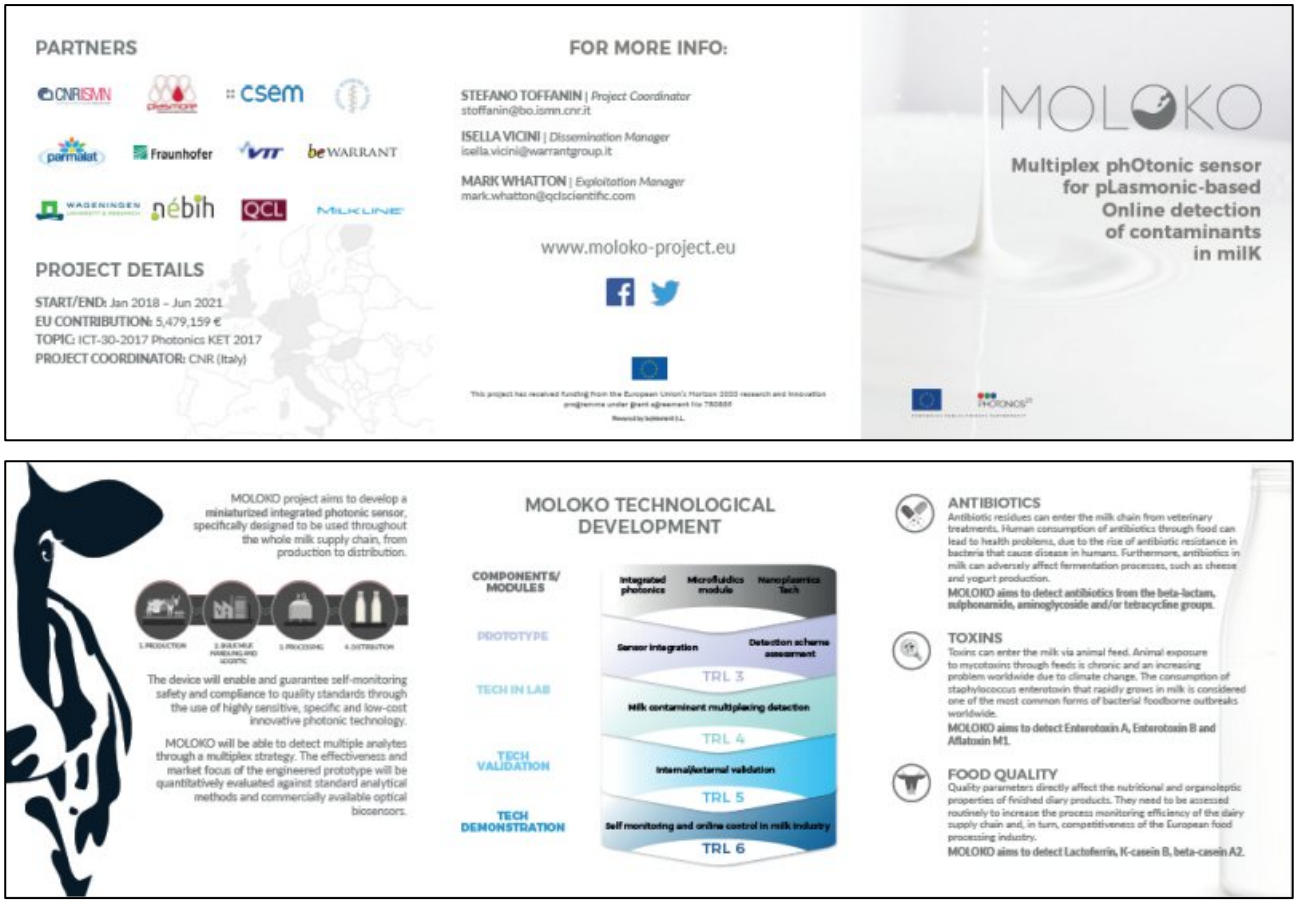

Figure 13 MOLOKO brochure - update May 2019

4.3 Poster

The MOLOKO poster was produced at the beginning of the project in 70x100 cm^2 format to introduce the project at conferences, meetings and thematic exhibitions. The poster reflects the main MOLOKO design concept to keep the project branding consistent and to make the project easily recognizable.

Figure 14 MOLOKO poster

4.4 Roll-up

The first release of the Roll-up, designed by BEWG, aims to give general details about the project, and it is mainly branding-oriented.

It has been exhibited in events such as the ICT2018 in December 2018 in Wien.

Figure 15 First Roll-up version

The second release of the Roll-up, designed by BEWG, is mainly information-oriented and aims to give details about the application fields of MOLOKO technology. It has been exhibited in events such as EuroTier 2018 in November 2018 in Hannover and IDF/ISO Analytical Week 2019 in June 2019 in Prague.

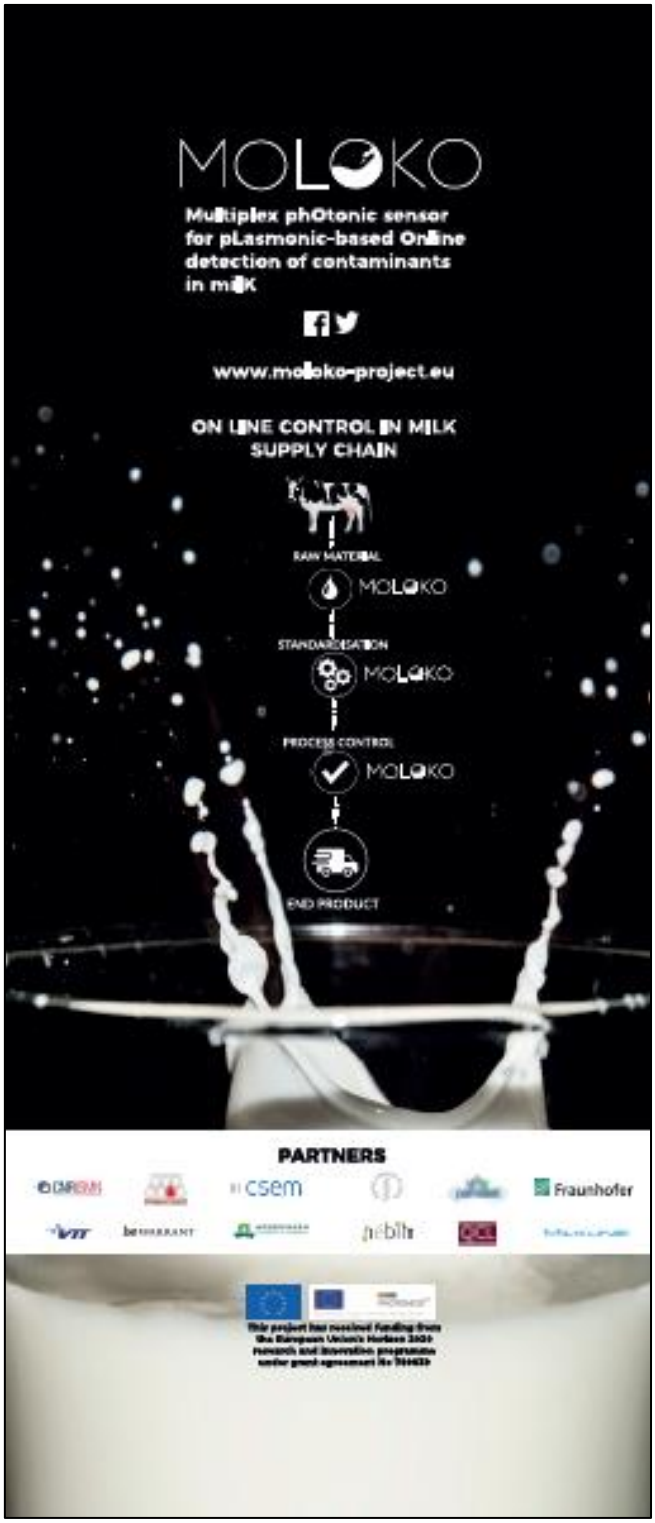

Figure 16 Second Roll-up version

4.5 Totem

The MOLOKO totem has been realized by BEWG for the EuroTier 2018 in November 2018 in Hannover to which MILKLINE participated. It describes the project concept, its objectives and technology development.

Project title, social media accounts, website, partners' logo and disclaimer are shown in every panel of the totem.

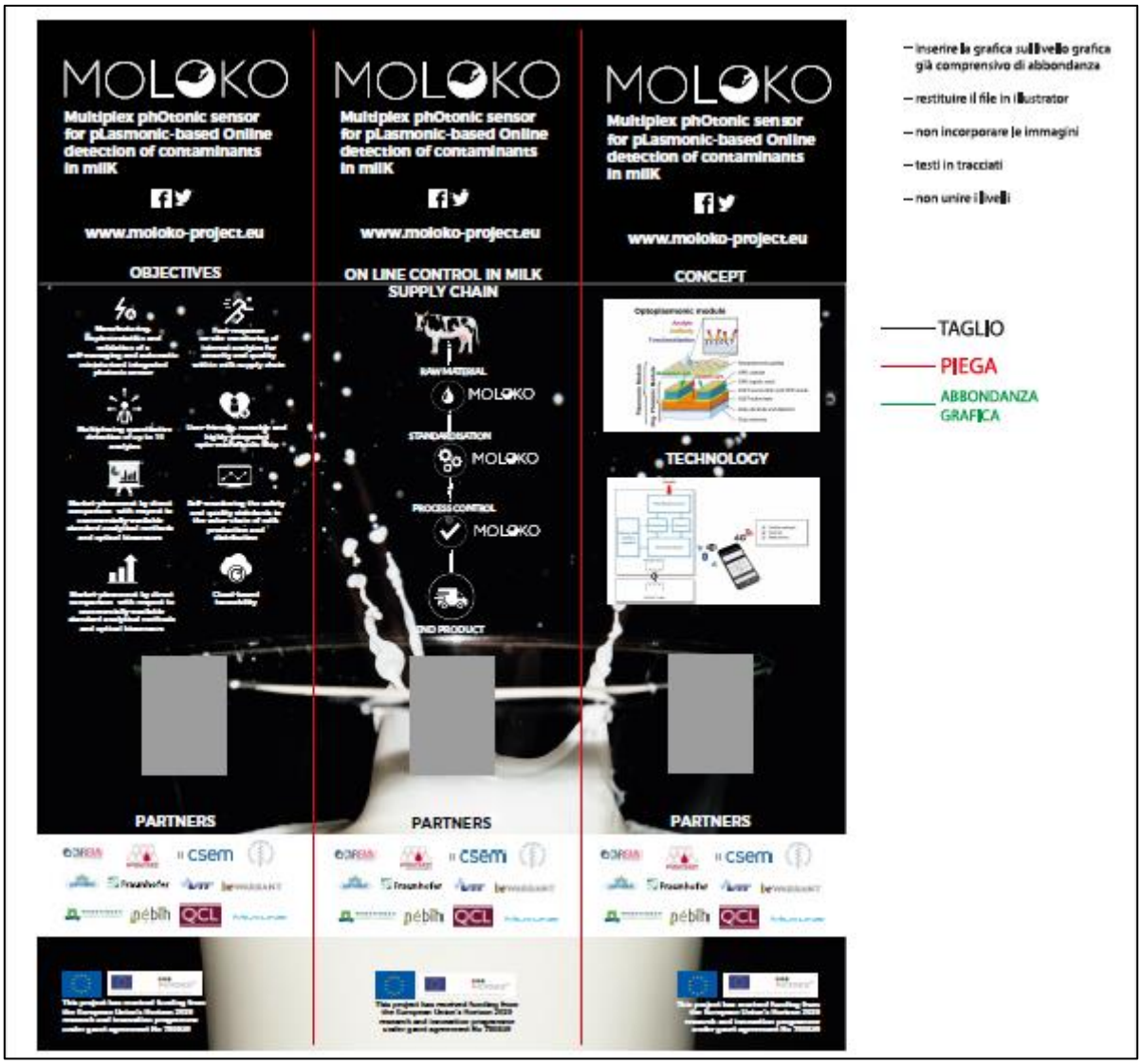

Figure 17 Totem

Figure 18 Totem at EuroTier 2018

5 MOLOKO first presentation video

Deliverable 9.5 describes in detail the MOLOKO first presentation video. The video has been developed by BEWARRANT, with the support of the Project Coordinator Stefano Toffanin (CNR) and project partners to promote the scope and the findings of MOLOKO project. In particular, end-users within the consortium such as PARMALAT and MILKLINE S.R.L. collaborate extensively in the development of the script of the video.

The video lasts 2:52 minutes with the aim to disseminate the objectives of the project to policy makers and to the general public. The video was uploaded on MOLOKO project website at the following link: http://www.moloko-project.eu/video/

The video was displayed to the several exhibitions which MOLOKO partners participated at and where the project had a booth or stand. In particular, at ICT2018 in December 2018 in Wien and at IDF/ISO Analytical Week in June 2019 in Prague.

Figure 19 MOLOKO video frame

6 List of dissemination activities performed

6.1 Scientific publications on peer-reviewed international journals

1. Koopman, Muccini, Toffanin "*High-Resolution Photoluminescence Electro-Modulation Microscopy by Scanning Lock-In*"
   Article in Zenodo repository
   https://zenodo.org/record/2650290
   Green Open Access

2. Prosa, Benvenuti, Pasini, Giovanella, Bolognesi, Meazza, Galeotti, Muccini, Toffanin, "*Organic Light-Emitting Transistors with Simultaneous Enhancement of Optical Power and External Quantum Efficiency via Conjugated Polar Polymer Interlayers"*
   ACS Appl. Mater. Interfaces 25580, 10, 2018
   DOI: https://doi.org/10.1021/acsami.8b06466
   Golden Open Access

3. Koopman, Natali, Bettini, Melucci, Muccini, Toffanin, "*Contact Resistance in Ambipolar Organic Field-effect Transistors measured by Confocal Photoluminescence Electro-Modulation Microscopy*"
   ACS Appl. Mater. Interfaces,
   https://doi.org/10.1021/acsami.8b05518
   Golden Open Access

6.2 Press releases

6.2.1 First Press Release "Europe invests funds on MOLOKO, the H2020 project on online detection of contaminant in milk"

http://www.moloko-project.eu/wp-content/uploads/2018/07/MOLOKO-official-press-release.pdf

Europe invests funds on MOLOKO, the H2020 project on online detection of contaminant in milk

MOLOKO (Multiplex photonix sensor for pLasonic-based Online detection of contaminants in milK) is an ambitious project - started in **January 2018** and spanning a **three years and a half period** – funded by the European Union under the Horizon 2020 Programme with about **5,5 million Euro**. **The National Research Council of Italy** (CNR) coordinates the project consortium composed by **12 partners** from **8 different countries**. The consortium includes European R&D centres (CSEM, RIKILT, Fraunhofer and VTT), SME's (Plasmore and QCL), large multinational industries involved in milk production and processing (Milkline and Parmalat), European food safety regulatory bodies (ISS and NEBIH) and consulting services (beWarrant).

The main objective of the project is the **manufacturing, implementation** and **validation of a self-managing and automatic miniaturized integrated photonic sensor** to be used as process analytical instrumentation for fastresponse on-site monitoring of interest analytes for security and quality within **milk supply chain**. In particular, the project aims at realizing multiplexing quantitative detection of up to 10 analytes among which food safety parameters, e.g. antibiotics (i.e. penicillin, ampicillin, cephalonium) and toxins (i.e. mycotoxins and bacterial toxins) and food quality parameters e.g. lactoferrin and caseins by implementing a highly-integrated optoplasmonic-microfluidic sensor in the strategic checkpoints along the entire supply and value chain of milk.

The MOLOKO miniaturized integrated photonic sensor is specifically designed according to **milk primary production, processing** and **distribution end-users** in order to enable and guarantee self-monitoring safety and quality standards by the use of a reliable, highly sensitive and specific, low-cost innovative self-screening photonic technology. The effectiveness and market-placement of the engineered functional prototype is quantitatively evaluated by direct comparison with respect to standard analytical methods and commercially available optical biosensors.

This project is funded by one of the ICT Programme Calls under the **Photonics Public Private Partnership (PPP).**

FOR FURTHER INFORMATION:

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Isella Vicini
DISSEMINATION MANAGER
beWarrant (Belgium)
E-MAIL: isella.vicini@warrantgroup.it

PROJECT WEBSITE:
http://www.moloko-project.eu

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 780839

6.2.2 QCL website press release "QCL joins the Horizon 2020 MOLOKO project for quality control of milk supply chain"

http://www.qclscientific.com/pdfs/Misc/QCL%20Press%20Release%20Moloko%2018_02_09.pdf

Press Release - QCL - Horizon 2020 MOLOKO Project

Title:

QCL joins the Horizon 2020 MOLOKO project for quality control of milk supply chain

In January 2018 the first meeting of the MOLOKO project consortium was held in Bologna, Italy, starting a three and a half year project to develop and commercialise miniaturised sensors for the *on-site* monitoring of milk quality throughout the supply chain.

MOLOKO (Multiplex phoenix sensor for pLasonic-based Online detection of contaminants in milK) aims for real-time monitoring of up to 10 food safety indicators including antibiotics, toxins and quality parameters. The innovative technology will be based on organic photonics, nanoplasmonics, biodiagnostics with immunoassays and microfluidics on a platform fit-for-use in milk production facilities.

The project is coordinated by CNR - National Research Council of Italy and involves 12 partners from 8 different countries. The consortium includes European R&D centres (CSEM, RIKILT, Fraunhofer and VTT), SME's (Plasmore and QCL), large multinational industries involved in milk production and processing (Milkline and Parmalat), European food safety regulatory bodies (ISS and NEBIH) and consulting services (Warrant Group).

QCL, as a specialist UK distributor of advanced analytical solutions in the dairy sector, is represented by Dr Mark Whatton who has the responsibility of Exploitation Manager for the project. QCL's role will involve the commercialisation for the project results and industrial networking activities.

MOLOKO is the winner of a Horizon 2020 European call which granted 6 million euros for its implementation under the Call Photonics KETS 2017.

www.qclscientific.com

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 78083.

PHOTONICS21

www.photonics21.org

6.2.3 Science business: Photonics to help dairy industry with new 5-minute scan

https://sciencebusiness.net/network-news/photonics-help-dairy-industry-new-5-minute-scan

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31 Aug 2018 | Network update from Photonics21

These updates are republished press releases and communications from members of the Science|Business Network

Photonics to help dairy industry with new 5-minute scan

Press release

A new optical sensor that can check the presence of contaminants in milk and produce a detailed reading in 5 minutes, is set to dramatically reduce costs, wastage and antibiotic use linked to the production, quality control, and processing phases in the dairy industry.

Scanning milk for 2 proteins and 10 contaminants simultaneously, the optical sensor will take measurements directly on-site at each point of the long and logistically-spread milk value chain.

Delivering a detailed reading in about 5 minutes, the sensor can look for any antibiotics ingested by the cows that have been transmitted to the milk. Using the collected information, companies can prevent contaminants, such as antibiotics and aflatoxin, from entering the food chain.

Across dairy farms today standard tests take days to perform, whereas this new palm-sized sensor will be the easiest way to check the presence of milk components (such as kappa-casein proteins) that are quality parameters for milk and other dairy products.

The same readout can help prevent food poisoning outbreaks like Staphylococcal enterotoxins (SEs) while at the

6.2.4 Milkline, Italian Newspaper "La Libertà". Article Title: "Progetto Moloko, Ecco Un Sensore Per Garantire La Sanita' Del Latte"

Progetto Moloko, ecco un sensore per garantire la sanità del latte

Tra i protagonisti anche un'azienda piacentina all'avanguardia nel settore lattiero-caseario, la Milkline di Podenzano

Claudia Molinari

PIACENZA

Che la tecnologia sia entrata nella filiera lattiero - casearia lo sapevamo da tempo. Così come sapevamo che a Piacenza ci sono aziende veramente all'avanguardia. Un'ulteriore dimostrazione, che certamente non guasta, arriva dal progetto di ricerca Moloko – che fa parte del programma Horizon 2020 dell'Unione europea –, in dettaglio "Multiplex phOtonic sensor for pLasmonic-based Online detection of contaminants in milK": coordinato dal CNR, ha per obiettivo la progettazione, la realizzazione e la validazione di un sensore ottico miniaturizzato, automatico e portatile per il controllo in situ di parametri per la sicurezza alimentare, lungo la filiera di produzione, lavorazione e distribuzione del latte. Dotato di un finanziamento di 6 milioni di euro, Moloko è iniziato nel gennaio 2018 e ha una durata di 42 mesi: sono coinvolti 12 partner di 8 nazioni. Oltre al Cnr di Bologna, coordinatore del progetto, sono protagonisti centri di ricerca europei - Fraunhofer, Csem Wageningen University & Research e Vtt per lo sviluppo delle diverse tecnologie; aziende che operano nel campo dell'innovazione della sensoristica, Plasmore e Qcl; e industrie che operano nella produzione e lavorazione del latte - Milkline srl e Parmalat. Queste ultime si occuperanno dell'attività di testing e validazione della tecnologia. Inoltre partecipano al progetto anche organismi di regolamentazione della sicurezza alimentare (Istituto Superiore della Sanità e Nebih). Questo progetto potrà contribuire ad impedire che contaminanti pericolosi entrino nella filiera di produzione e influiscano negativamente non solo sulla salute dei consumatori, ma anche sul processo di fermentazione, passaggio fondamentale per la produzione dei prodotti tipici. Inoltre, le informazioni raccolte grazie alla presenza del sensore saranno utili a verificare la qualità del latte e forniranno anche preziose indicazioni sulla salute dell'animale, tema quest'ultimo al quale i consumatori sono sempre più sensibili. Proprio per fare il punto sull'attività svolta e programmare quella futura nei giorni scorsi alla Milkline si è svolto un meeting, al quale hanno preso parte i partner del progetto: il prossimo appuntamento per il gruppo è fissato per il mese di settembre in Commissione europea, dove verranno anche esposti i primi risultati del lavoro di ricerca. Durante le giornate piacentine, i ricercatori hanno manifestato molto interesse per la visita in stalla, dove sarà integrato il sensore, direttamente nella linea di produzione del latte. Questo lavoro di integrazione del dispositivo e di sua validazione sarà appunto svolto da Milkline, in quanto leader nel settore della mungitura.

I partecipanti al meeting davanti alla Milkline di Podenzano e durante l'incontro sul progetto Moloko

FRIGERIO (MILKLINE)

«La sicurezza alimentare nostra priorità»

«Abbiamo accolto con piacere la proposta del Cnr Ismn di partecipare al progetto, con loro avevamo già partecipato a un altro bando regionale con un ottimo punteggio, ma non sufficiente per risultare fra i vincitori. Il progetto punta alla sicurezza alimentare quindi una priorità assoluta per il contesto in cui operiamo». Così Elio Frigerio, direttore generale Milkline, commenta l'esperienza che l'azienda sta portando avanti, sottolineando anche di aver ospitato con grande piacere il gruppo di lavoro del progetto Moloko. «Nei tre giorni di lavoro nella nostra sede i ricercatori di tutta Europa che partecipano al progetto hanno visitato e conosciuto una realtà aziendale del settore della mungitura come Milkline ed un allevamento da latte della pianura padana. L'esperienza consentirà sicuramente di dare un ulteriore valore aggiunto all'attività che stanno conducendo, affinché il risultato della ricerca possa trovare piena applicazione». _Mol.

Economicità e velocità tra i pregi del dispositivo

Tra le peculiarità anche la possibilità di rilevare molte informazioni in modo semplice

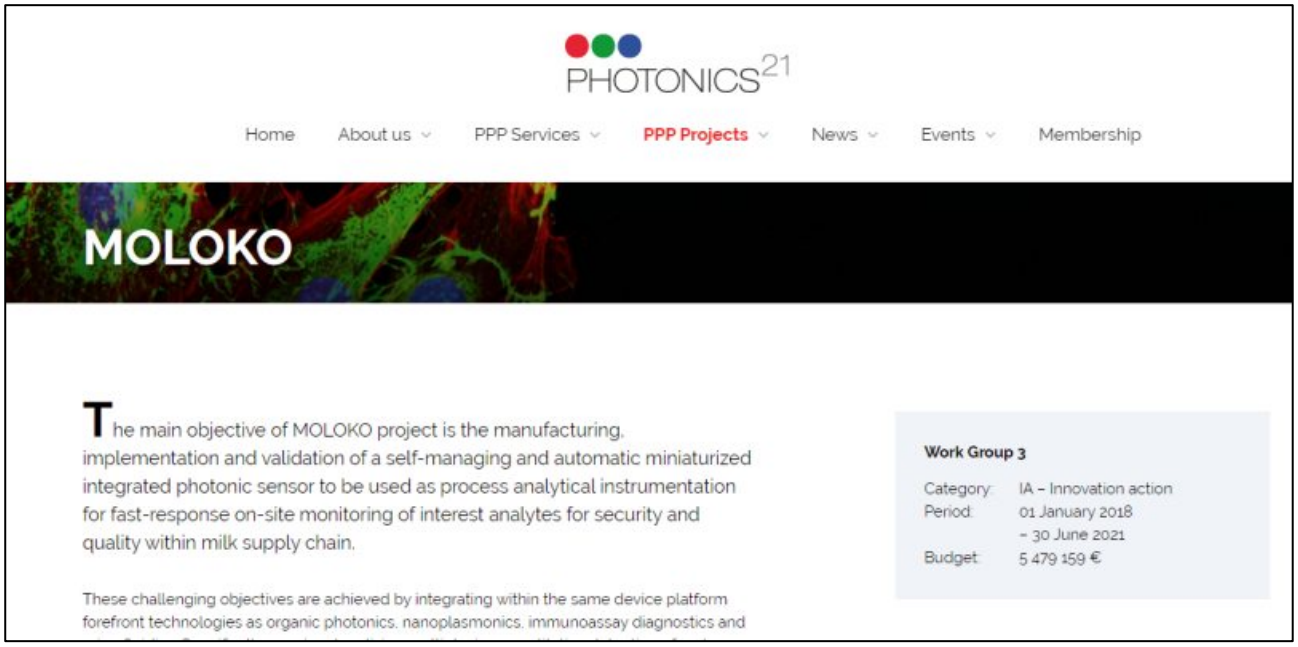
Il sensore ottico - che sarà messo a punto integrando diverse tecnologie avanzate - permetterà di rilevare molte informazioni in modo semplice, veloce ed economico con notevoli vantaggi rispetto ai test di laboratorio. Il dispositivo consentirà di effettuare le misurazioni direttamente sul campo e in tutti i punti della filiera, senza dover inviare i campioni nei laboratori attrezzati.

Mediante il sensore sarà possibile ottenere informazioni in tutti i punti di controllo strategici della catena di produzione e distribuzione del latte, rilevando la presenza fino a 10 sostanze contemporaneamente tra cui antibiotici e micotossine, indicatori di sicurezza alimentare, parametri legati alla qualità del latte come la k-caseina e alla salute dell'animale come la lattoferrina.

Notevoli vantaggi anche per i tempi di misurazione e analisi, che saranno significativamente ridotti (tipicamente 5 minuti), diversamente da quanto accade nei laboratori di analisi. Questo, grazie alla capacità della tecnologia di effettuare contemporaneamente misure multiple e semiquantitative di sostanze differenti. _Mol.

6.2.5 Photonics 21

https://www.photonics21.org/ppp-projects/workgroup-3/Moloko.php



6.3 Non-scientific and non-peer-reviewed publication (popularised publication)

1. Optics
   Milk sensor tipped to cut contaminants
   http://optics.org/news/9/8/48

2. New Electronics
   Photonics to help dairy industry with new 5-minute scan
   http://www.newelectronics.co.uk/electronics-news/photonics-to-help-dairy-industry-with-new-5-minute-scan/182413/

3. The Latest
   Photonics to help dairy industry with new 5-minute scan
   https://thelatest.com/story/help-scan-photonics-industry-8139552

4. Electronics 360
   Photonics to Help Dairy Industry with New Five-Minute Scan
   https://electronics360.globalspec.com/article/12684/photonics-to-help-dairy-industry-with-new-five-minute-scan

5. Laser Focus World
   Five-minute dairy milk scan is goal of surface plasmon resonance sensor
   https://www.laserfocusworld.com/articles/2018/08/five-minute-dairy-milk-scan-goal-of-surface-plasmon-resonance-sensor.html

6. Electronics and Engineering Design IT
   The dairy industry gets a helping hand with a new five-minute scan
   https://www.eedesignit.com/the-dairy-industry-get-a-helping-hand-with-a-new-five-minute-scan/

7. Electronic Specifier
   Photonics to help dairy industry with new five-minute scan
   https://www.electronicspecifier.com/sensors/photonics-to-help-dairy-industry-with-new-five-minute-scan-1

8. Tech Mezine
   Photonics to help dairy industry with new 5-minute scan
   https://www.techmezine.com/top-10-news/photonics-help-dairy-industry-new-5-minute-scan/

9. Novus Light Tech
   Scanning Dairy Cows with Photonic Technology
   https://www.novuslight.com/canny-dairy-cows-with-photonic-technology_N8380.html

10. AZO Optics
    Photonics to Help Dairy Industry with New 5-Minute Scan
    https://www.azooptics.com/News.aspx?newsID=23921

11. Informatore Zootecnico, the italian magazine specific for zootechnical sector
    Un Sensore Ottico Per La Qualità Del Latte
    http://www.moloko-project.eu/wp-content/uploads/2018/11/MOLOKO-article-on-Informatore-Zootecnico.pdf

6.4 Conferences

1. **PIC International Conference**,
   10-11 April 2018, Brussels (Belgium),
   Oral Presentation, Adding the 'tech' to biotech opportunities for photonic integrated circuits
   Reached people: Over 400 delegates at the event and around 200 at the talk
   (Participating partner: ENAS)

2. **European Photonics Roadshow**
   16 May 2018, Florence (Italy),
   Invited contribution: Multiplex phOtonic sensor for pLasmonic-based Online detection of contaminants in milK – MOLOKO
   Reached people: About 50-70 people
   (participating partner: CNR)

3. **ASSET2018**
   28-31 May 2018, Belfast (Northern Ireland), Belfast Summit on global food integrity 2018,
   Poster presented entitled "Innovative multiplex organic photonic sensor for plasmonic-based detection of contaminants in milk: the MOLOKO project"
   Reached people: Over 600 delegates from 47 countries participated to the event
   (participating partner: QCL)

4. **CIMTEC 2018**,
   June 10-14, 2018, Perugia (Italy)
   Invited contribution: Simultaneous Tenfold Brightness Enhancement and Emitted-light Spectral Tunability in Transparent AmbipolarOrganic Light-emitting Transistor by Integration of High-k Photonic Crystal
   Reached people: 150-200 people
   (participating partner: CNR)

5. **CIMTEC 2018**
   June 10-14, 2018, Perugia (Italy)
   Oral contribution: Enhancing the electroluminescence of organic light-emitting transistors by modifying the metal/organic interface with conjugated polar polymers
   (participating partner: CNR)

6. **E-MRS 2018**,
   18-22 June, 2018, Strasbourg (France)
   Oral contribution: Enhanced electroluminescence in hybrid organic light-emitting transistors through a conjugated polar polymer interlayer
   Reached people: 200-250
   (participating partner: CNR)

7. **SPIE Optics and Photonics 2018**,
   19-23 August, 2018, San Diego (USA)
   Contribution: An innovative multiplex organic photonic sensor for plasmonic-based detection of contaminants in milk: the MOLOKO project
   Reached people: 400
   (participating partner: CNR)

8. **Materials.it**
   22-26 October 2018, Bologna (Italy)
   Materials.it is one of the main Italian National Conference on Materials Science and Technology. Presentation of MOLOKO project.
   Reached people: 250-300
   (participating partner: CNR)

9. **OE-A 44th Working Group Meeting**
   23,24 October 2018, Aix-en-Provence (France)
   Poster presentation and mini-talk about MOLOKO project
   Reached people: 50-70
   (participating partner: CNR)

10. **Materials Research Society (MRS)**
    Fall meeting 2018, 25-30 November 2018, Boston (USA)
    MOLOKO poster presentation
    Reached people: 400-500
    (participating partner: CNR)

11. **LOPEC conference**
    19-21 March 2019, Munich (Germany)
    Poster presentation to companies and stakeholders in the field of flexible and printed electronics, together with academic institutions
    Reached people: 2,700 participants from 44 countries, 163 exhibitors from 19 countries participated in the trade show
    (participating partner: CNR)

12. **Analytica**
    21-22 March 2019, Rome (Italy)
    The conference is addressed to farmers, lab technicians and managers, production managers.
    Reached people: Around 60 people
    (participating partner: CNR)

13. **XVII Congress National Mastitis Council 2019 annual meeting**
    8-9 March 2019, Reggio Emilia (Italy)
    Oral presentation "New technologies for cattle health and milk quality"
    Reached people: Around 100 people
    (participating partner: PARMALAT)

14. **IDF Mastitis Conference 2019**
    14-16 May 2019, Copenhagen (Denmark)
    Poster presentation and oral presentation
    Reached people: Around 400 people
    (participating partner: PARMALAT)

15. **E-MRS Spring**
    27-31 May 2019, Nice (France)
    Oral presentation
    Reached people: 250-300

(participating partner: CNR)

16. **Nanotexnology**
    29 June - 6 July 2019, Thessaloniky (Greece)
    This conference is a world-class International event in Nanosciences and Nanotechnologies (N&N) that focuses on the latest advances on N&N and promotes profound scientific discussions between scientists, researchers from different disciplines and market leaders
    Reached people: Around 200 people
    (participating partner: CNR)

6.5 Exhibitions

1. **Eurotier 2018** – dairy cattle and zootechncial exhibition on the 13th- 16th November 2018 in Hannover (Germany)
   A project totem and brochures of the MOLOKO Project were present In the Milkline's stand.
   Reached people: About 160,000 attended the conference
   (participating partner: MILKLINE)

2. **ICT 2018: Imagine Digital - Connect Europe**
   In this event organized in Vienna in December 2018 by the European Commission and Austria, in occasion of the Austrian presidency of the EU, the project MOLOKO was invited to exhibit. MOLOKO was present with a booth with totem, brochures and flyers. Demonstrators of the single-device components of the MOLOKO sensor were shown.
   Reached people: 4,800 attended the conference. About 150 visited MOLOKO stand.
   (participating partners: CNR, BeWG, PLASMORE)

3. **IDF/ISO Analytical Week 2019**
   21 – 25 June 2019, Prague (Czech Republic)
   Exhibition stand with 2 MOLOKO brochure types (first and second release), Plasmore brochures, technology examples from Plasmore (plasmonic grating samples), CNR (2 non-encapsulated OLET samples and one encapsulated OLET with the plasmonic grating deposited on the bottom of the OLET) and FhG FEP and ENAS (three example samples showing the complete microfluidic module - PCB on bottom and top, the semi-complete version, which allows a view at the inside -injection moulded part + PCB- as well as the pure injection moulded substrate with all microfluidic channels and reservoirs), MOLOKO project poster and QCL promotional items.
   Reached people: Around 150 people
   (participating partner: QCL)

4. **BioChip Berlin**
   7-9 May 2019, Berlin (Germany)
   MOLOKO was present at the ENAS booth
   Reached people: Around 600 people
   (participating partner: Fraunhofer ENAS)

6.6 Fairs

1. **Compamed/Medica**
   12-15 November 2018, Düsseldorf (Germany)
   MOLOKO was present at the ENAS booth
   Reached people: Around 120116 people
   (participating partner: Fraunhofer ENAS)

6.7 Workshops

WP3 Workshop Life Sciences and Health at Meeting Photonics21 - Photonics strategy process towards a new multiannual roadmap; Brussels, Belgium; March 8-9 2018. Invited contribution: Multiplex phOtonic sensor for pLasmonic-based Online detection of contaminants in milK – MOLOKO

6.8 Internal Training Event

1. **PARMALAT event 03 July 2018**, Piana di Monte Verna (Italy)
   Project MOLOKO – progress status of the work @Parmalat Video/Film Ready Mid-September (PARMALAT)
2. **Milkline's Internal dissemination event**
   December 2018, Piacenza
   (MILKLINE)
3. **M15 Internal meeting MOLOKO with all the partners** (WP10)
   April 8-9-10 2019, Piacenza
   (MILKLINE)

6.9 Networking with other EU-funded projects

MOLOKO has seek opportunities for exchange of scientific knowledge and dissemination activities with the following EU-funded projects:

ACRONYM, start-end	**Website**	**Update from MOLOKO partners:** please describe how we networked with the indicated project. **Please add new projects if relevant!**
COBIOPHAD 2016-01-01 to 2019-07-31	https://www.cobiophad.eu/	Meeting in May 2019 at CNR between the MOLOKO project Coordinator and the Director of Lumensia sensors (partner in COBIOPHAD project) in order to present the different photonic platforms which are the major contents of the two projects and discuss about possible technology integration
PHASMAFOOD 2017-01-01 to 2019-12-31	http://www.phasmafood.eu/	Ongoing discussion between the Coordinators of MOLOKO and PHASMAFOOD projects on possible collaboration between the team. Ideas on the preparation and realization of joint workshop.
ICT4WATER Cluster	https://www.ict4water.eu/	The MOLOKO project is currently active in the ICT4water cluster space-platform in futurium.
MYCOKEY 2016-04-01 to 2020-03-31	http://www.mycokey.eu/	Ongoing discussion between Plasmore partner and the Coordinator of the project in order to assess possible implementation of the MOLOKO detection scheme in sustainable mycotoxin management along food and feed chains. Possible meeting between the MOLOKO representatives and MycoKey General Assembly in 2020.

6.10 Stakeholders

1. **Photonics21 Annual meeting of stakeholder's association**
   27-28 March 2019, Brussels (Belgium)
   The European Technology Platform Photonics21 unites the majority of the leading photonics industries and relevant R&D stakeholders along the whole economic value chain throughout Europe. Today Photonics21 has more than 2500 members. At the meeting, more than 200 people were present. (participating partner: CNR)

6.11 Pictures selection

PIC International Conference

ASSET2018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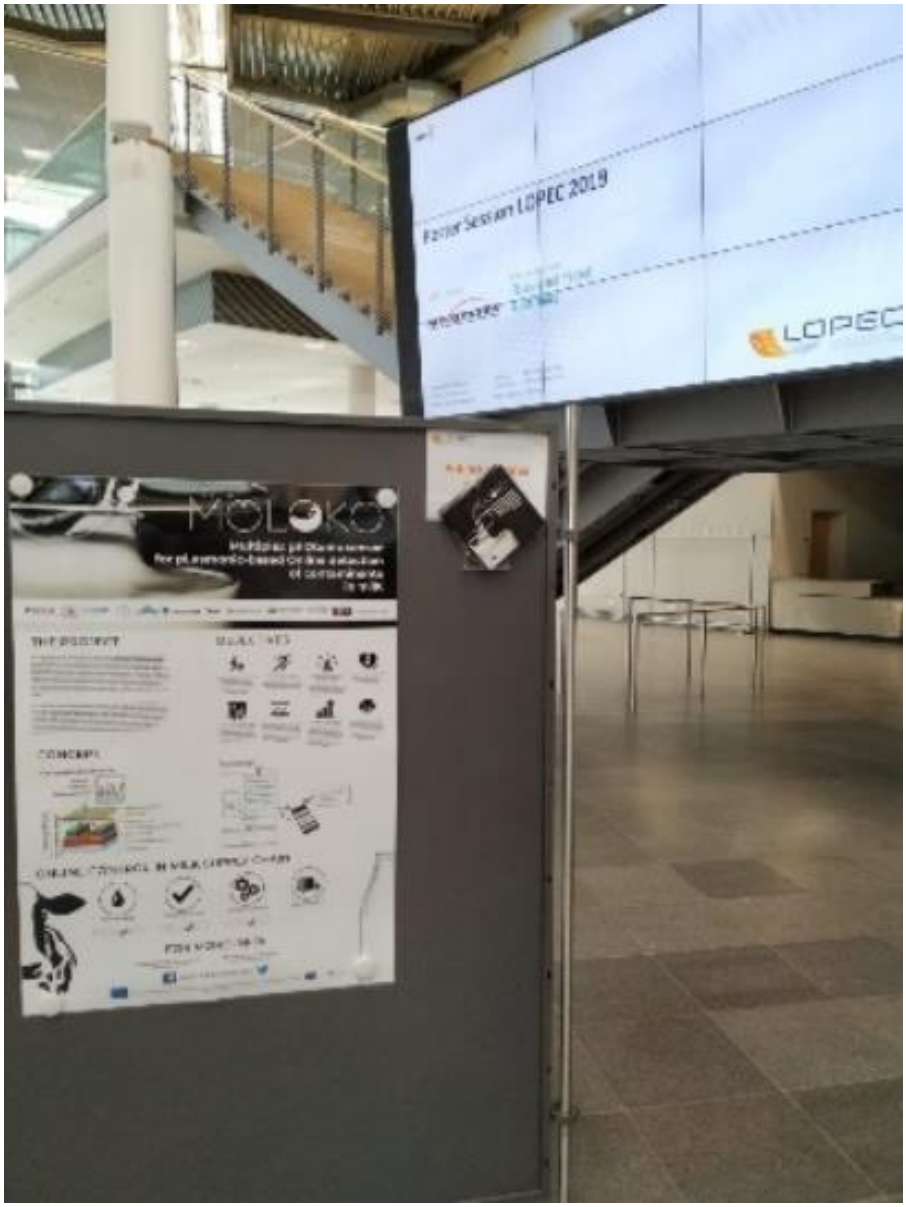
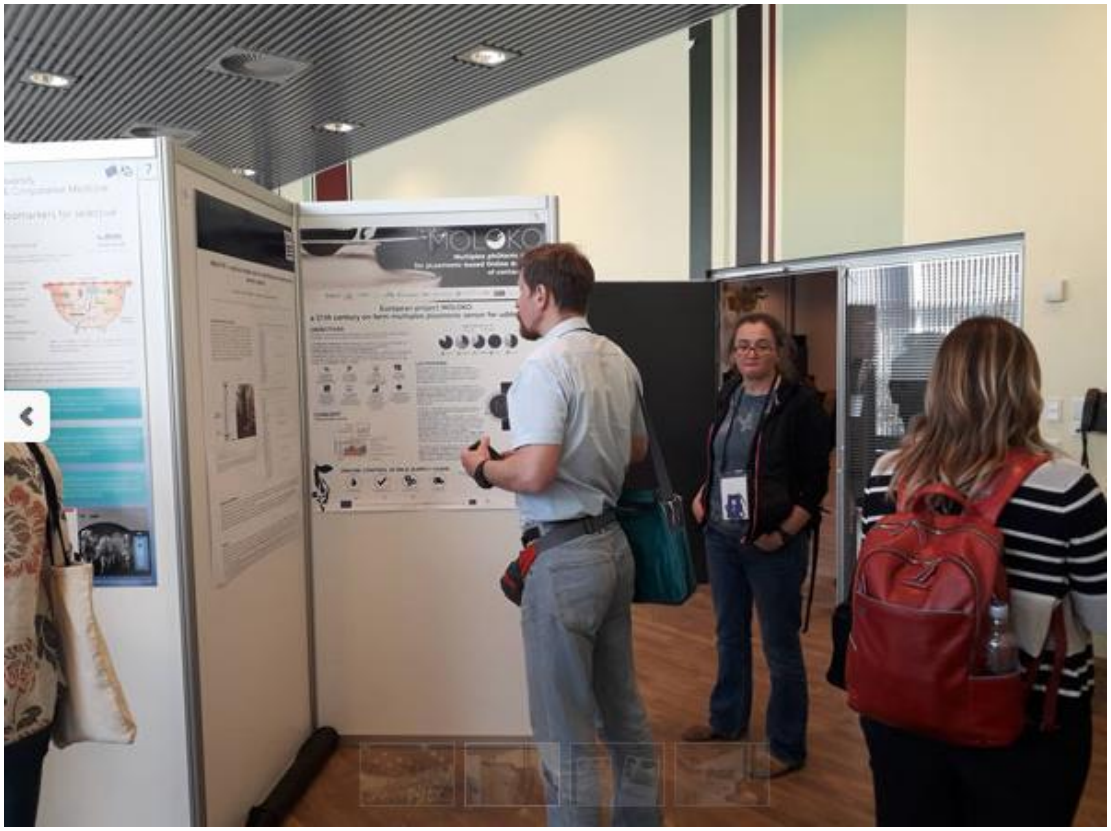
MOLOKO
Multiplex phOtonic sensor
for pLasmonic-based Online detection
of contaminants
in milK
THE PROJECT
OBJECTIVES
CONCEPT
Optoplasmonic module
Technology
ONLINE CONTROL IN MILK SUPPLY CHAIN
FOR MORE INFO:

LOPEC Conference



XVII Congress National Mastitis Council 2019 annual meeting

IDF Mastitis Conference 2019



ICT 2018: Imagine Digital - Connect Europe

7 Conclusions

MOLOKO project partners have been actively involved in dissemination and communication activities during the first 18 months of the project. MOLOKO project received wide interest while participating to conferences, exhibitions and fairs and partners used the communication material developed for communication and dissemination purposes.

The Exploitation and Innovation WorkGroup within the Consortium considers fruitful the activity performed up to M18 in order to highlight the impact of MOLOKO system and increase the visibility of MOLOKO approach and technology. In the next 6-8 months, a capitalization of the achieved results is expected for attracting the more industry- and dealing-related players. The finalization of first demonstrator of MOLOKO system (as expected by the Annex 1) will promote further the brand of MOLOKO project and increase the number of connections that may be relevant also for the Exploitation Plan.