



Photonics  
France  
LA FÉDÉRATION FRANÇAISE  
DE LA PHOTONIQUE

PHOTONICS  
BRETAGNE  
Photonics Innovation Hub



# Business meeting Photonics 4 Agri-Food



**Wednesday 13th March 2019**

9:30 > 18:00 including networking lunch and BtoB meetings



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CFIA exhibition  
Parc Expo  
Rennes (35)



Hall 6 booth A2-D3  
Thematic Area  
Usine Agro du Futur



Photonics 4  
Agri-Food

Rennes | 13 march 2019

Business meeting

- » Agri-food industry needs
- » Photonics providers pitches
- » Networking lunch
- » BtoB meetings
- » CFIA exhibition



EPRISE  
EMPOWERING PHOTONICS

# Business meeting Photonics 4 Agri-Food



Photonics is becoming a major technology in the agri-food industry which is facing crucial challenges in production and quality control.

Agri-food industry needs to focus innovation on several key aspects:



- ✓ Food safety,
- ✓ Raw material control,
- ✓ Packaging, conditioning and preservation,
- ✓ Real-time process monitoring.

Hence, Photonics France and Photonics Bretagne want to initiate new collaboration between the big players of the agri-food sector and the Photonics providers (in optical sensors, scanning, imaging, lasers and lighting) to solve together the challenges of the industry!

In the framework of the European projects NEXTPHO21 and EPRISE, they co-organize a business meeting « Photonics 4 Agri-Food » at the CFIA (largest «Tech for agri-food» exhibition in France) in Rennes (Brittany).

After an introduction to understand issues of the sector, agri-food end-users will present their needs. This will be followed by pitches from photonics providers who will present their innovative technologies.

It will be then time for participants to exchange further during a networking lunch and BtoB meetings in the afternoon. «Innovation galery tour» of the photonic demonstrators exhibited on the pavilion « Usine Agro du Futur » (Food Factory of the Future) will also be organized before visiting further the whole exhibition!



## Agenda

Wednesday 13th March 2019

From 9:30	Registration / Welcome coffee
10:00 - 10:05	<b>Welcoming words</b> Ivan TESTART, Photonics France and David MECHIN, Photonics Bretagne
10:05 - 10:20	<b>Increasing Cross fertilization between photonics, farming and food industry. An initiative from PhotonicsFrance for safer, greener and higher-quality food.</b> Jacques COCHARD, Tematys
<b>10:20 - 12:10</b>	<b>Agri-food industry needs:</b>
10:20 - 10:40	<b>The contribution of Photonics to the Smart Agri-Tech Sector. Automated quality measurements, precision horticulture, phenotyping &amp; robotics.</b> Rick VAN DE ZEDDE, Senior Scientist, Wageningen University
10:40 - 11:00	<b>Impact of Photonics in Roullier business and activities.</b> Bastien BILLIOT, Computer Vision & Statistics Research Engineer, CMI (Centre Mondial de l'Innovation), Roullier Group
11:00 - 11:20	<b>Photonics in Western France Food Industry. Current applications and potential developments.</b> Jean-Michel GUERIN, Technical Director d'Aucy Long Life, d'Aucy Group
11:20 - 11:30	<b>Break</b>
11:30 - 11:50	<b>Microbiological analysis. How new technologies can be implemented in the food industry.</b> David Tomas FORNES, Senior Engineer, NESTEC, R&D center Nestle
11:50 - 12:10	<b>Feedback from a food technical centre : use of image analysis in the evaluation of pieces amount in Foie Gras blocks.</b> Frédérique DURANTON, Project Manager, CTCPA
12:10 - 12:30	<b>Photonics technologies and innovations providers pitches</b> Greentropism, Idil Fibres Optiques, Indatech, Photon Lines, Piseo, Silltec, New Vision Technologies
12:30 - 13:00	<b>Break / Free time</b>
13:00 - 14:30	<b>Networking lunch</b>
14:30 - 15:30	<b>1-on-1 meetings - Session 2</b> Meet and collaborate with Business Meeting and CFIA Rennes participants. <b>or</b> <b>Innovation galery tour (limited places)</b> Participate to a guided presentation of the latest innovations/demonstrators exhibited on the « Usine Agro du Futur » (Food Factory of the Future).
15:30 - 18:00	<b>1-on-1 meetings - Session 3</b> <b>or</b> <b>Free time to visit CFIA exhibition (closing at 20:00)</b>

### FREE ATTENDING

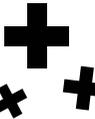


This day offers great opportunities for agri-food industry and photonics companies: an event not to be missed !

#### MANDATORY REGISTRATION

(until 11th march/limited 60 attendees)

 <https://cfiarennes2019.b2match.io/>



# Agri-food industry needs About speakers



## Jacques COCHARD, TEMATYS founder and partner



**Title:** Increasing Cross fertilization between photonics, farming and food industry - An initiative from PhotonicsFrance for safer, greener and higher-quality food.

**Bio:** Jacques hold an Engineer degree from the École des Mines of Nancy (France) and Master in Material Sciences from University Lorraine. He has been working for 20 years at the crossroads of optical technologies and their applications. He initiated the technology transfer policy in the OPTICSVALLEY cluster from 2001 by conducting numerous studies for French RTOS. In terms of industrial development, Jacques has supported in their strategic development more than 100 companies for 15 years - most of them being deep-tech spin-off from photonics academic labs. In terms of sourcing and business intelligence, Jacques worked for major international optics companies such as Schott, Coherent, Sumitomo for scouting emerging technologies.

For the last 10 years, he published numerous articles in business press (Optik & Photonik, LaserFocus World, PhotonicSpectra ...) and has also lectured in worldwide congress on various topics like Photonics and Agriculture, Photonics and Automotive, Terahertz Imaging, Quantum Optics.

Jacques is an active member of PhotonicsFrance (French photonics industry association), EPIC (European Photonics Industry Consortium), Photonics21. In PhotonicsFrance, he chairs the Photonics and Agriculture Commission to promote optical technologies in the world of farming, agriculture and food industry.

## Rick VAN DE ZEDDE, Senior Scientist, Wageningen University



**Title:** The contribution of Photonics to the Smart Agri-Tech Sector - Automated quality measurements, precision horticulture, phenotyping & robotics.

**Bio:** Rick van de Zedde is a senior scientist/ business developer Plant Phenomics and Automation at Wageningen University & Research (WUR), where he has worked since 2004. His background is in Artificial Intelligence with a focus on imaging and robotics. Since 2006 he has been one of the coordinators of www.AgroFoodRobotics.nl, a joint initiative of several research institutes within Wageningen UR.

Currently he is leading the development of the Netherlands Plant Eco-phenotyping Centre (NPEC) - www.npec.nl. NPEC is an integrated, national high-tech research facility housed by WUR and Utrecht to enable scientists to carry out accurate high-throughput phenotyping: studies of plant performance. As a business developer Rick van de Zedde is currently focussed at setting up new consortia and research programs on the cross-over between photonics and agrifood.

## Bastien BILLIOT, Computer Vision & Statistics Research Engineer, CMI, Roullier Group



**Title:** Impact of Photonics in Roullier business and activities

**Bio:** Bastien Billiot is computer vision research engineer at the plant nutrition laboratory of Roullier Group, a fertilizer company, where he is in charge of the phenotyping platform and data analysis. He holds a PhD in computer vision from the University of Dijon in France. Much of Bastien's current work is focused towards the conception of imagery-based system dedicated to plant phenotyping and the development of associated algorithms for image processing and data analysis. His fields of interests and expertise are computer vision, remote sensing, machine learning and deep learning applied to plant phenotyping (shoot and root part).

## Jean-Michel GUERIN, Technical Director d'Aucy Long Life, d'Aucy Group Member of VALORIAL Pole of Competitiveness on Food



**Title:** Photonics in Western France Food Industry. Current applications and potential developments.

**Bio:** Jean-Michel GUERIN has been involved in the food industry for 27 years. Technical Director at d'Aucy canning division, he has seen important developments of photonics related technologies on the vegetable, fruit and meat processing lines. The rate of innovation is still important.

D'Aucy Group is a farmer owned cooperative with a head count of more than 4000 employees, a turnover of 1.2 billion euros and 9000 farmers with factories in western France, Spain and Hungary. Food processing includes vegetables with d'Aucy brand, meat and eggs, with strong integration and control of the primary production. D'Aucy Group is active at a regional level within Valorial Pole of Competitiveness, a cluster dedicated to innovation in the food industry and the food chain in western France (Bretagne, Normandie and Pays de Loire).

## David Tomas FORNES, Senior Engineer, NESTEC, R&D center Nestle



**Title:** Microbiological analysis. How new technologies can be implemented in the food industry.

**Bio:** David Tomas is senior scientist in the Microbial and Molecular analytics group at Nestlé Research, in Lausanne (Switzerland). He works on the evaluation, development and validation of microbiological methods applied in Nestlé laboratories. He participates in several International Organization for Standardization (ISO), European Committee for Standardization (CEN) and International Dairy Federation (IDF) technical committees developing reference methods for microbiological food analysis. He worked for 15 years as Microbiology laboratory manager and technical expert in the National Accreditation Body.

## Frédérique DURANTON, Project Manager, CTCPA



**Title:** Feedback from a food technical centre : use of image analysis in the evaluation of pieces amount in Foie Gras blocks

**Bio:** Frédérique Duranton is a project manager at CTCPA, a French technical centre for the Food Industry. She studied in Nantes in Food Engineering. Since she got her PhD in 2012 in Food Processing, she is aiming at gathering science and food industry in her projects. She works mainly on novel technologies and specialized in High Pressure Processing. However, her scientific background leads her to manage R&D projects outside her field of expertise.





# Co-organizers Photonics France & Photonics Bretagne

# An event supporting by two european projects



## Photonics France

Director: Ivan TESTART

Photonics France is intended to be the known, recognized and legitimate interlocutor at national and international level by acting as a professional union in the best interests of the sector and its members.

It coordinates and ensures the coherence of regional, national and international actions and continues the drafting and implementation of the "French Photonics Roadmap" with the support of our state actors.

Photonics France develops and improves services to members through the organization and animation of thematic events, trade shows, the promotion of their know-how or economic, technical and regulatory services.



### Services

- ✓ Networking and business
- ✓ Lobbying
- ✓ Communication and events
- ✓ Employment and training
- ✓ Promotion of know-how or economic, technical and regulatory services ...

## Photonics Bretagne

Director: David MECHIN

Photonics in Brittany is represented by Photonics Bretagne, a Photonics Innovation Hub located in Lannion (Brittany, France). Photonics Bretagne gathers a cluster (113 members: companies, research centres, schools and support agencies) and a Research and Technology Organisation (RTO).

With a high level of expertise, the structure develops specialty optical fibres and components such as tubes, capillaries, tapers... (product line: PERFOS®). Scientific studies and proof of concept in the field of biophotonics (in particular for the agri-food sector) are also a growing activity.

In addition, Photonics Bretagne supports innovation and contributes to industrial and technological development of its members and regional SMEs. The association promotes the integration of photonics technologies in all application areas, and especially into agri-food chains (food safety, quality and sorting of products, on-line process control ...).



### Services

- |   |   |
|---|---|
| <b>Support to innovation projects</b> <ul style="list-style-type: none"> <li>✓ Technology consulting</li> <li>✓ Market analysis</li> <li>✓ Technological watch</li> <li>✓ Project engineering</li> <li>✓ Connection</li> <li>✓ Organisation of meetings, technological or business workshops ...</li> </ul> | <b>Research and innovation services</b> <ul style="list-style-type: none"> <li>✓ Feasibility study (PoC)</li> <li>✓ Optical qualification: spectroscopy (UV-Visible-Infrared, Raman...)</li> <li>✓ Demonstrator and prototyping</li> <li>✓ Industrial transfer</li> <li>✓ Characterisation, modelling and simulation</li> </ul> |
|---|---|

Photonics France and Photonics Bretagne have been involved in many EU projects in the recent years, in particular Coordination & Support Action (CSA), which have the objective to strengthen the promotion, dissemination, development, networking and collaboration in the field of photonics and its applications in Europe.

## H2020 NEXTPHO21 (2018-2021)

The NextPho21 project consisting of the Photonics21 secretariat and 12 National Technology Platforms - representing more than 25 photonics cluster - runs at the request, with the consent and on behalf of the Photonics21 PPP Boards which closely steer all activities of the project.

NextPho21 provides the decisive support to the European Photonics21 community for developing a European industrial strategy for the upcoming 10 years. The strategy approach focusses on future market opportunities arising from the megatrends like digitisation, urbanisation, smart anything everywhere which disrupt business models and whole industries. Through developing the joint strategy, the European photonics industry will be in the pole position to become a key driver of this revolution and create growth and jobs in Europe.

This includes a central public relation and dissemination services to the projects demonstrating the impact of photonics for wider deployment of photonics in end user industry products.

NextPho21 implements a dedicated set of actions to increase the investments in photonics research, development and manufacturing by European venture capital funds and the European Investment Bank to bring photonics innovation to the market. It will trigger cross regional and cross member state strategy development and investments in photonics respectively by providing a coordination and support platforms to these stakeholder groups.



## H2020 EPRISE (2016-2019)

Driven by OPTITEC, the EPRISE project "Empowering Photonics through Regional Innovation Strategies in Europe" gathers nine National Photonics organisations or regional photonics clusters around Europe, including Photonics Bretagne.

Representing € 1.4 million, the project aims to promote and support Photonics as a Key Enabling Technology. It focuses on Life Science applications in markets where Europe holds a leading position: Medical Technologies, Pharmaceuticals, Agriculture and Food.

The EPRISE consortium will organise a 'European Photonics Roadshow' - a series of 7 major events around Europe in 2018 and 2019, which aim to provide companies with concrete solutions from market experts on how to overcome market barriers and which aim to boost collaboration along the complete value chain via pre-arranged business-to-business meetings.

The EPRISE project plans to highlight the potential of the photonics sector to selected regional funding authorities and decision-makers around Europe with the aim of better coordination of regional and European-wide funds to the benefit of local photonics companies.



# How to register to this event



To access the business meeting, don't forget to also **CREATE YOUR BADGE TO CFIA EXHIBITION !**

<http://cfia2019.site.calypso-event.net/en/visiteurs/coordonnees.htm>

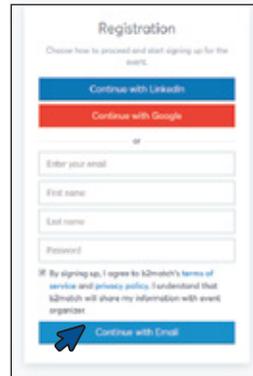
Because the Business meeting Photonics 4 Agri-Food is organised in the framework of the pavilion « Usine Agro du Futur » (Food Factory of the Future) within the CFIA exhibition, **this event is entirely free!**

It's an amazing opportunity but **places are limited (60 attendees)**. So, **registration is mandatory** (until 11th march).

**1** Connect to the platform that manages registration to the different events of the « Usine Agro du Futur », including the Business meeting Photonics 4 Agri-Food and 1-on-1 meetings sessions.

<https://cfiarennes2019.b2match.io/>

**2** Register online.



**3** Choose your type of participation, then your program according to your availabilities and interests.

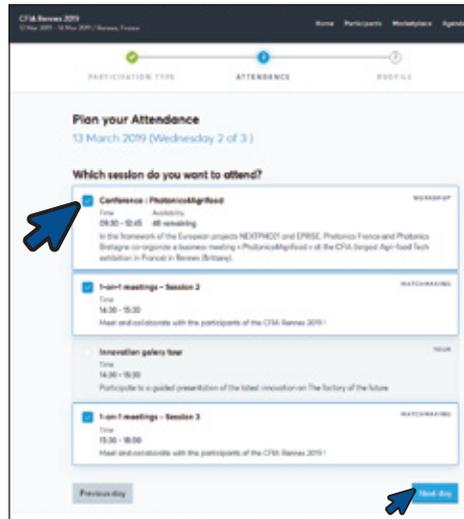
To attend the Business meeting Photonics 4 Agri-Food the 13th march:

Click on **Next day** on the first page.

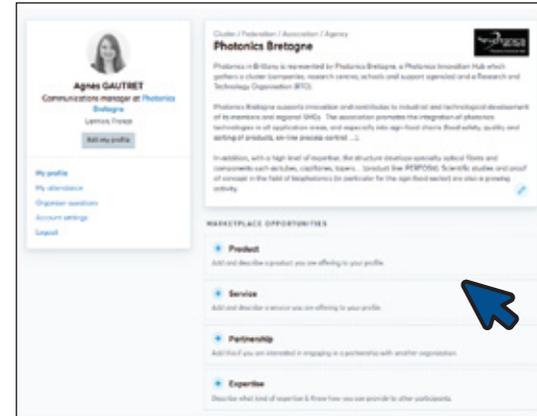
Check the corresponding box and at least one of the two 1-on-1 meetings sessions. You can also select the « Innovation gallery tour » if you want.

If you are not interested by other workshops or matchmakings, click on **Next day** then **Continue**.

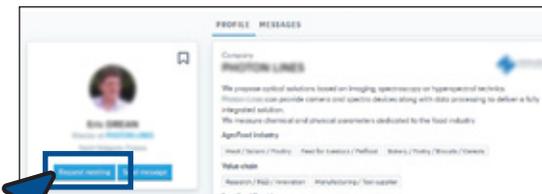
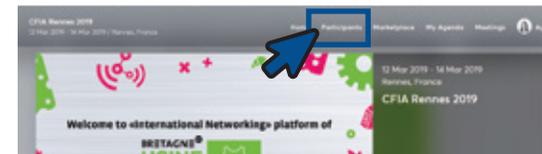
You can sign up for other sessions or cancel your attendance after your registration.



**4** Publish your business focus and collaboration wishes.



**5** Identify your future partners. Browse the catalogue of participants and request meetings.



**6** Manage your requested meetings.



# Practical information

Wednesday 13th March 2019

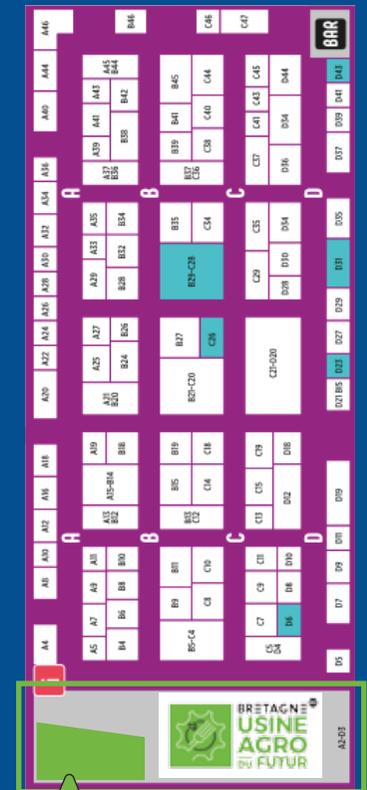
## ADDRESS:

 Parc Expo Rennes Aeroport  
La Haie Gautrais  
35170 Bruz  
France

## How to reach the exhibition:

 <https://cfiaexpo.com/en/why-visit/practical-information>

## HALL 6 | BOOTH A2-D3



**Business meeting  
Photonics 4 Agri-Food**