

# Light-Based Solutions for Agriculture, Veterinary and Ecology

Uppsala | 19-20 May 2016

## Workshop

- » Talks by Photonics and End-user Experts
- » Partnering & Networking
- » Exhibition
- » Guided Tours



PHOTONICS PUBLIC PRIVATE PARTNERSHIP

PHOTONICS<sup>21</sup>



## GENERAL INFORMATION

 **PhotonicsSweden**  
The Swedish Technology Platform in Optics and Photonics



### REGISTRATION:

Please register for free: [www.delegia.com/oasis2016](http://www.delegia.com/oasis2016)

### DATE:

Thursday May 19, 10 am, to Friday May 20, 2 pm.

### WORKSHOP VENUE

Swedish Agricultural University (< 1 km from SVA), Uppsala, Sweden

[www.photonicsweden.com/files/workshop\\_PH21\\_OASIS/Travel to Uppsala.pdf](http://www.photonicsweden.com/files/workshop_PH21_OASIS/Travel%20to%20Uppsala.pdf)

### HOTELS

<http://www.destination uppsala.se/en/Stay/>

### EXHIBITION

Please contact Petra Bindig ([petra@photonicsweden.org](mailto:petra@photonicsweden.org)) if you are interested in exhibiting (table top, roll up).

### WORKSHOP,, EXHIBITION, MATCH-MAKING and GUIDED TOUS

will be held in parallel to the technical sessions to provide industry, institutes and associations an opportunity to display their products and services and bridge the gap between science and industry.

### FURTHER INFORMATION

For further information please go to [www.photonicsweden.org](http://www.photonicsweden.org)

**THURSDAY, 19 MAY 2016**

8.:30 -10:00

On-site registration and welcome coffee

Room: **Övre foajén**

10:00 -12:00

**Session 1 | The Background**

Welcome

Pierre-Yves Fonjallaz, PhotonicSweden

Room: **Sal L**

10:00 -10:10

Presentation of the EU project OASIS

*Cecilia Pinto, Optitec, France*

10:10 - 10:20

Light – what is photonics?

*Magnus Breidne, The Royal Swedish Academy of Engineering Sciences (IVA), Chairman PhotonicSweden*

10:20 -10:40

Biophotonics in Europe

*Prof. Roberto Pini, University of Florence, Optoscana*

10:40 -10:50

Photonics and Biophotonics in Sweden

*Pierre-Yves Fonjallaz, PhotonicSweden*

10:50 - 11:05

Possibilities for Agriculture and Livestock Farming using Light-Based Technologies

- Visions from applied research with focus on dairy production -

*Mårten Hetta, Swedish Agricultural University (SLU)*

11:05 -11:20

Healthy animals. Safe humans. – An overview of the National Veterinary Institute

*Prof. Karin Artursson, SVA, & SLU*

11:20 -11:40

EU Calls for the participants of this workshop

*Ziga Valic, Optitec and SLU's Grants Office*

11:40 -12:00

European Biophotonics Platform

*Guus Taminiau, Photonics Netherlands*

12:00 -13:00

Room: **Övre foajén**

**Lunch & Exhibition**

13:00 - 15:00

**Session 2 | Light on/for Veterinary and Ecology**

13:00 - 13:20

Needs of Veterinary

*Mikael Leijon, National Veterinary Institute (SVA)*

Room: **Sal L**

13:20 - 13:35

*Presentation from a Spanish company Medlumics*

13:35 - 13:50

IR imaging for environmental and veterinary applications

*Lea Dabiri, FLIR Systems*

13:50 - 14:05

Imaging systems for large animals

*Damiano Fortuna, IMAGINALIS S.r.l., Italy*

14:05 - 14:20

Environmental Monitoring and Assessment

*TBC, Swedish Agricultural University*

14:20 - 14:35

Airborne bathymetric and topographic multi sensor LiDAR

*Axel Axelsson, Airborne Hydrography*

14:35 - 14:50

Optical Sensors for environmental surveillance or veterinary

*Presentation from Germany*

15:00 - 15:30

**Coffee Break**

Room: Övre foajén

15:30 - 17:00

**Session 3 | Pitches from companies and End-users**

15:30 - 17:00

Companies or technology providers present their solutions and their offer.

End-users present their needs. Every pitch is max 4 minutes long. There is a very strict time-keeper. Max 15 Pitches

Room: Övre foajén

17:10 - 18:20

**Session 4 | Match-Making**

End-users and technology providers discuss in groups of 6-8 persons. Probably 3 x 15-20 minutes.

20:00-22:00

**Conference Dinner**

Location: **Restaurang Linnéträdgården in down-town Uppsala**

09:00 - 10:30

**Session 5 | Light on/for Ecology and Agriculture**

09:00-09:15

Room: **Sal L**

Vegetation analysis from ground and satellites  
*Prof. Lars Eklundh, Lund University*

09:15 - 09:30

*Danijela Vukadinovic, Wageningen University, Netherlands*

09:30 - 09:45

Quality control of grain, flour, food and feed  
 TBA

09:45 - 10:15

Precision Farming (tutorial)  
*Dr. Bo Stenberg, Swedish Agricultural University (SLU)*

10:15 - 10:30

*Presentation from France*

10:30 -11:00

Room: **Övre foajén**

Coffee Break exhibition

11:00 - 12:30

**Session 6 | Light on/for Agriculture**

11:00-11:30

Room: **Sal L**

How photonics can transform farming  
*Per Warg & Gösta Forsén, DeLaval & Farmic*

11:30-11:45

IR spectroscopy as a tool to understand environmental stress in plant pathology  
*Saroj Kumar, Uppsala University, Dept. Engineering Sciences*

11:45 - 12:00

An intelligent LED greenhouse lighting system with feedback control  
*Daniel Bänkestad & Johan Lindqvist, Heliospectra*

12:00 - 12:15

Non-destructive optical method for phenotypic analysis of early stage tree seedlings growth  
*Cristina Rusu, Acreo Swedish ICT*

12:15 -12:30

Concluding remarks  
*Pierre-Yves Fonjallaz & Ziga Valic, PhotonicSweden and Optitec*

12:30 -14:00

Room: **Övre foajén**

**Lunch & exhibition**

**14:00 - 16:00 End of workshop and guided tours**