





# Agtech 2030 Sweden

## Register here: https://dinkurs.se/Workshop20211125

The aim of the workshop is to gather actors in photonics together with actors in agriculture and food processing, to meet and discuss future demands and needs. This EU-funded Workshop is free of charge for everyone that has registered!



## Prize Award for Best Photonic Company of the Year!

## **Program:**

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09:00-10:15	Registration at K1 in Kåkenhus
10:15-12:30	Sessions including Discussion and Matchmaking at K1 in Kåkenhus
12:30-14:00	Lunch at the Visualiseringscenter's Restaurant. (Both lunch & PEA-visit for all)
12:30-14:00	A study visit at the PEA-Printed Electronics Arena during lunch for all participants
14:00-15:00	3D-Dome Presentation at Visualiseringscenter in Kopparhammaren 6
15:15-16:00	Sessions including Discussion and Matchmaking at K1 in Kåkenhus
16:00-16:15	Coffeebreak
16:15-17:45	Sessions including Discussion and Matchmaking at K1 in Kåkenhus
17:45-18:00	Prize Award for best Photonics Company 2021
18:30-21:30	Informal dinner



## Photonics 4

## **Agriculture & Food**

Norrköping | 25 November 2021

#### Workshop and Exhibition

- » Talks by Photonics Experts and End-users
  » Networking & Matchmaking
- » Exhibition



#### PROGRAM

00.00 10.15	Desistantian autoide Desus K4
09:00-10:15	Registration outside Room K1
10:15-10:30	Welcome & Presentation about PhotonicSweden and PhotonHub Europe Lennart BM Svensson and Petra Bindig, PhotonicSweden
10:30-11:00	Visions for Agtech2030 & Which role plays photonic technology in future food production Per Frankelius, Associate Professor (Docent), Linköping University and process leader of the initiative "Agtech 2030"
11:00-11:15	Visual Sweden, innovations cluster with a focus on visualization and image analysis with applications in industry, medicine and society Anders Carlsson, Senior Coordinator at Linköping University and Process Manager at Visual Sweden
11:15-11:30	Discussion & Matchmaking
11:30-11:45	Photonic Solutions for Food & Agriculture Gabriella Josefsson, PhD, Sales Engineer, Hamamatsu Photonics Norden AB
11:45-12:00	Image Processing at Saab Dynamics Jimmy Jonsson, Innovation Manager and Image Processing Specialist, Saab Dynamics AB
12:00-12:15	<b>Printing excellence, prototyping, sensors and applied research in conducting polymers</b> Duncan Platt, Unit Manager PEA for Printed Electronics Ursula Hass, Unit Manager PEA for Bio organic Electronics
12:15-12:30	Discussion & Matchmaking
12:30-14:00	Lunch at Visualiceringscenter
12:30-14:00	Study visit at PEA during lunch
14:00-15:00	3D-Dome presentation at Visualiceringscenter
15:00-15:15	Walk back to K1 and short pause
15:15-15:30	Usage of blue lasers for weed management" Janis Jasko, PhD, CEO and Co-founder, Weedbot Ltd, Latvia
15:30-15:45	<i>Using prism-based cameras for multi-spectral applications</i> Michael S. Lund, Sales Director EMEA, jAi A/S, Denmark
15:45-16:00	Discussion & Matchmaking
16:00-16:15	Coffeebreak & Exhibition
16.15-16.30	is it possible to reduce food waste with light?
10.13 10.30	Malin Jonsson, PhD, Development & Innovation Manager, Gasporox AB (publ)
16:30-16:45	Respiratory rate monitoring for heat-stress detection Astrid Lundmark, PhD, Senior Systems Engineer, Saab AB
16:45-17:00	Discussion & Matchmaking
17:00-17:15	Vision applications for robotic milking of dairy cows Björn Wiklander, Manager, Data Science & Machine Learning, DeLaval International AB
17:15-17:30	Qualisys - a Swedish motion capture company - some applications in animal life science Fredrik Müller, Board Member, Strategic advisor, Qualisys AB
17:30-17:45	Discussion & Matchmaking
17:45-18:00	Prize Award for Best Photonics Company 2021
18:00-18:30	Short walk to Restaurant Knäppingen Spiseri & Bryggeri at Västgötegatan 19, Norrköping
18:30-21:30	Informal Dinner

## Invited speakers on 25<sup>th</sup> November



#### Welcome by PhotonicSweden

**Lennart BM Svensson & Petra Bindig,** PhotonicSweden, Kista. Presentation about PhotonicSweden and EU-project PhotonHUB <u>www.photonhub.eu</u> – "How photonics can help your innovation".

**Per Frankelius,** Associate Professor (Docent), Linköping University and process leader of the initiative "Agtech 2030" focusing on agricultural innovations. Research, teaching, interaction with companies, part of regional development projects etc. I think agriculture is the most innovative as well as most important sector in the world.



**Anders Carlsson,** Senior Coordinator at Linköping University and Process Manager at Visual Sweden that is Europe's most attractive innovative environment for visualization and image analysis, LiU, Norrköping



**Astrid Lundmark,** PhD, Senior Systems Engineer, Saab AB, Linköping. Interested in respiratory monitoring with the intended application of detection of heat stress, as well as early detection of disease. Other applications are also conceivable, such as verifying that animals do not breathe at slaughter, or monitoring their condition during transport.

**Malin Jonsson,** PhD, Development & Innovation Manager, Gasporox AB (publ), Lund. Leading our Development and Innovation team at Gasporox where the focus is developing laser-based products for quality inspection in the pharmaceutical, beverage and food industries.



**Fredrik Müller,** Board Member, Strategic advisor, Qualisys AB, Gothenburg. Animal & Equine Biomechanics - We provide tools for precisely measuring equine and canine movements — both indoor and outdoor. Using our sequence-coded active markers, horse tracking is taken to a whole new level. QHorse, is our system for objective lameness gait analysis. Our optical tracking technology, also known as optical motion capture, makes it possible to measure the position of very fastmoving objects with extremely high accuracy.



**Duncan Platt,** Unit Manager PEA for Printed Electronics that is a part of the Smart Hardware department at RISE Norrköping. Prior to this Duncan worked at RISE as Acting Section Manager for Printed Electronics and also Sensor Systems as well as being Group Manager for Electronic Design and Integration. Duncan has over 30 years of experience in electronics design such as Ericsson, ÅF, Autoliv and GEC Marconi Avionics.



**Ursula Hass** Unit Manager PEA for Bio organic Electronics that is part of the Smart Hardware department and belongs to the Digital Systems division at RISE Norrköping, Long experience of research and development of innovative collaborations between research institutes, academy, industry and society, on both national and international level.







**Michael S. Lund,** Sales Director EMEA, jAi A/S, Denmark. Advanced color and multispectral capabilities, highly reliable operation, and a range of high-speed options including both line scan and area scan solutions helps to create systems that ensure the highest quality in what we eat and drink. In the food industry, JAI cameras sort fruit and vegetables by color, grade, and size on conveyor belts.

**Björn Wiklander,** Manager, Data Science & Machine Learning, DeLaval International AB, Tumba, Björn leads the work as head of the engineering group; Data Science & Machine Learning, Animal Intelligence & Milking points. Björn was also responsible for the development of the TOF camera image processing software and the camera HW itself. Furthermore, Björn's group works with the BCS - Body Condition Scoring camera, Hull camera.

**Gabriella Josefsson**, PhD, Sales Engineer, Hamamatsu Photonics Norden AB. Protecting and preserving foods and packaging. Hamamatsu offers multiple options for use in devices designed for improving food inspection, sorting, safety, and quality. These accurate, reliable sensors and cameras can give inspectors the capability required to identify issues in food products and packaging before they are shipped.

**Jimmy Olsson,** Innovation Manager and Image Processing Specialist, Saab Dynamics AB, Linköping. Jimmy works with development of new image/signal processing solutions for various applications aimed for the defense and/or commercial industry. Jimmy will also present Saab Ventures that is the group's corporate venture arm and was set up in 2001 to obtain leverage on Saab's abundant engineering expertise, with a focus on spinning out Saab ideas and technology into independent companies.

Janis Jasko, PhD, CEO and Co-founder, Weedbot Ltd, Riga, Latvia. Biologist and Plant protection specialist. Janis with his team has developed a highly precise laser technology that eliminates the harmful weeds to a millimeter precision. The innovative weeding laser technology gets rid of harmful weeds faster and more efficiently than any human power.



Campus Norrköping is located in the old industrial landscape close to Norrköping city center.

- The venue's lecture hall is K1 located in Kåkenhus on Bredgatan 33.
- Visualiseringscenter is located in Kopparhammaren 6 at Kungsgatan 54.



Study visits at Printed Electronics Arena and the Dome at Visualization Center C.







The Dome at Visualization Center C