

## Oral Presentations

Tuesday 7<sup>th</sup> of February, 2017  
Berlin, Germany

08:00 – 08:30 Registration at CITY CUBE, Messe Berlin

08:30 – 09:00 Opening Ceremony

*Mr. Wilfried Wollbold, Global Brand Manager, Fruit Logistica  
Dr. Martin Geyer, Head, Department of Horticultural Engineering, ATB*

**Session 1** *Chair: Prof. Giancarlo Colelli, University of Foggia, Italy*

09:00 – 09:30 **Keynote by Prof. Hidemi Izumi** (Kindai University, Japan)  
Microbiological safety of fresh produce from the farm-to-table food chain

09:30 – 10:00 *Coffee break & poster presentation*

10:00 – 10:15 Application of simplex lattice design for optimization of active modified atmosphere for pomegranate arils based on microbial criteria  
*Oluwafemi James Caleb, Leibniz Institute for Agricultural Engineering & Bioeconomy (ATB), Germany*

10:15 – 10:30 Effect of temperature abuse on volatile profile and quality of rocket leaves packaged in modified atmosphere  
*Maria Amodio, Università di Foggia, Italy*

10:30 – 10:45 Plasma processed water (PPW) – an alternative for fresh-cut salad and fresh sprout sanitation?  
*Uta Schnabel, Leibniz Institute for Plasma Science and Technology, Germany*

10:45 – 11:00 Electrolyzed sodium bicarbonate against citrus green mold: inhibition of penicillium digitatum and induction of fruit defences  
*Antonio Ippolito, University of Bari, Italy*

11:00 – 11:15 Scale-up to pilot plant dimensions of plasma processed water generation for fresh-cut lettuce treatment  
*Mathias Andrasch, Leibniz Institute for Plasma Science and Technology, Germany*

11:15 – 11:30 Fungal development and associated rot and mycotoxins during ethylene supplemented controlled atmosphere storage of sweet potato  
*Sulaiman Sowe, Cranfield University, United Kingdom*

11:30 – 11:45 *Discussion*

11:45 – 12:45 *Group Photo, lunch break & poster presentation*

**Session 2**

*Chair: Prof. Manuela Zude-Sasse, Leibniz Institute for Agricultural Engineering & Bioeconomy (ATB), Germany*

- 12:45 – 13:15 **Keynote by Prof. Maria Isabel Gil** (Spanish National Research Council, Spain)  
Preharvest conditions affect quality of leafy greens
- 13:15 – 13:30 Development of cultivation management system in orchard based on ICT  
*Shinichi Kameoka, Mie University, Japan*
- 13:30 – 13:45 StoreNSure: a molecular test to predict the occurrence of black spot on stored carrots  
*Peter Balk, NSure, Netherlands*
- 13:45 – 14:00 Effects of postharvest washing processes on microbial community dynamics associated to endive salad  
*Antje Fröhling, Leibniz Institute for Agricultural Engineering & Bioeconomy (ATB), Germany*
- 14:00 – 14:15 Color evaluation of images acquired using open platform camera and mini-spectrometer under natural lighting conditions  
*Atsushi Hashimoto, Mie University, Japan*
- 14:15 – 14:30 Non-destructive method for oil content and moisture content prediction in oil palm fruitlets using electrical impedance spectroscopy  
*Samsuzana Abd Aziz, Universiti Putra, Malaysia*
- 14:30 – 14:45 Ripeness evaluation of white grape (*Vitis Vinifera* L.) by using of a prototype of LED based optical device  
*Beghi Roberto, University of Milan, Italy*
- 14:45 – 15:00 *Discussion*
- 15:00 – 15:30 *Coffee break & poster presentation*

<b>Session 3</b>	<i>Chair: Dr. Pramod Mahajan, Leibniz Institute for Agricultural Engineering &amp; Bioeconomy (ATB), Germany</i>
15:30 – 16:00	<b>Keynote by Prof. Christopher Watkins</b> (Cornell University, USA) Postharvest handling practices for better quality and longer shelf life
16:00 – 16:15	Effect of raw material quality and modified atmosphere packaging on color and texture retention of wild rocket ( <i>Diplotaxis tenuifolia</i> L.) <i>Merete Edelenbos, Aarhus University, Denmark</i>
16:15 – 16:30	Non-destructive detection of chilling stress for improving keeping quality of fresh produce: cucumbers as a model <i>Victor Rodov, ARO - The Volcani Center, Israel</i>
16:30 – 16:45	Lessons learned from the intelligent container <i>Reiner Jedermann, University of Bremen (IMSAS), Germany</i>
16:45 – 17:00	Design of an environmental variables monitoring prototype during transportation of horticultural products <i>Francisco Artés-Hernández, Universidad Politécnica de Cartagena, Spain</i>
17:00 – 17:15	Inline application of NIR system in produce sorting machines <i>Schmilovitch Ze'ev, ARO - The Volcani Center, Israel</i>
17:15 – 17:30	The use of Janny MT box in cherry storage <i>Mehmet Ali Koyuncu, Suleyman Demirel University, Turkey</i>
17:30 – 17:45	<i>Discussion</i>
17:45 – 18:00	<i>Closing Ceremony by Prof. Manuela Zude-Sasse</i>
<b>18:30</b>	<b>Welcome Reception at FRUIT LOGISTICA, Palais am Funkturm</b>

## Further Dissemination Sessions in Fruit Logistica

Wednesday 8<sup>th</sup> to Friday 10<sup>th</sup> of February, 2017  
Berlin, Germany

### Session 1: The Future in Realtime – Quality and Safety



Date  
February 8, 2017

Time  
15:00 - 15:30

Location  
Halle 7.2a, Stand B-04



Two examples of technological solutions which will help to improve the quality and safety of fresh produce as well as convenience products, such as quality and freshness, and at the same time increase safety.

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**Moderator:**

Mike Knowles, Editor, Eurofruit Magazin GB

**Speaker:**

Prof. Francisco Artés-Hernández, Ph.D., Head of Postharvest & Refrigeration Group. Food Engineering Dep., ETSIA - Universidad Politécnica de Cartagena

Professor Hidemi Izumi, Faculty of Biology-Oriented Science and Technology, Kindai University

### Session 2: Microbiology – Caught between accuracy and over meticulousness



Date  
February 9, 2017

Time  
15:00 - 16:00

Location  
Hall 17, Kleiner Stern



Requirements for food safety place enormous demands on suppliers, with regulations and maximum levels set by governments and retailer stricter than ever. In spite of this, food safety scares continue to occur. The truth is that modern analytical methods can detect levels that were previously practically unmeasurable. How can the fresh produce sector cope effectively with these new demands?

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**Presenter / Contact person:**

Kaasten Reh, Project Director Events & Awards, Fruchthandel Magazin

**Speaker:**

Mabel Gil, PhD, CEBAS-CSIC

Udo Lampe, Managing Director, Analytica Alimentaria GmbH, Spain/Germany

Thomas Landwehr, Dole Europe GmbH

Hugh Mowat, Head of Technical, Morrisons Supermarkets, UK

### Session 3: Big Data – From the cloud to the field



Fresh Produce Forum

**Date**

February 10, 2017

**Time**

13:00 - 14:00

**Location**

Hall 17, Kleiner Stern



Computer based planning of production, drones to help calculate the best use of pesticides, the optimum level of selective irrigation, or determine final crop volumes - modern information technology is becoming the standard. And it is also providing a major contribution to making production more efficient - a crucial factor in times of increasing population levels and climate change.

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**Presenter / Contact person:**

**Kaasten Reh**, Project Director Events & Awards, Fruchthandel Magazin

**Speaker:**

**Jose Blasco**, Instituto Valenciano de Investigaciones Agrarias (IVIA)

**Professor Giancarlo Colelli**, University of Foggia

**Professor Christopher Watkins**, School of Integrative Plant Science, Cornell University

**Dr. habil. Manuela Zude-Sasse**, Group leader Precision Fruticulture, Leibniz Institute for Agricultural Engineering and Bioeconomy (ATB)

## Poster Presentations

Tuesday 7<sup>th</sup> of February, 2017

- P01 Assessing potential benefits and sensitivity to carbon dioxide of different artichoke cultivars  
*Maria Luisa Amodio, Leonarda Mastrandrea, Francesca Piazzolla, Giancarlo Colelli*
- P02 Effect of regulated deficit irrigation on yield and fruit quality during shelf life of sweet cherry  
*Francisco Artés-Hernández, Victor Blanco-Montoya, Rafael Domingo-Miguel, P.J. Blaya-Ros, Roque Torres-Sánchez, Alejandro Pérez-Pastor, Ginés B. Martínez-Hernández*
- P03 Postharvest treatments to control physiological disorders and decay in lemon fruit  
*Gineés B. Martínez-Hernández, Perla A. Gómez, Benito Orihuel-Iranzo, J. Bretó, Francisco Artés-Hernández*
- P04 Modified atmosphere and humidity storage container for strawberry  
*Graziele Grossi Bovi, Ali Jalali, Oluwafemi Caleb, Cornelia Rauh, Pramod Mahajan*
- P05 Chemical, physical and sensorial characterization of fresh quinoa sprouts (*Chenopodium quinoa* Willd.) and effects of modified atmosphere packaging on quality during cold storage  
*Tiziana D'Ambrosio, Maria Luisa Amodio, Giancarlo Colelli*
- P06 A novel approach for determination of invisible quality changes in modified atmosphere packaged fresh and fresh-cut fruit and vegetables  
*Alexandru Luca, Justyna Wieczynska, Merete Edelenbos*
- P07 The use of natural antimicrobial compounds in packaging of leafy greens: impact on microbial load and sensory quality  
*Wieczynska Justyna, Alexandru Luca, Ulla Kidmose, Ivana Cavoskia, Merete Edelenbos*
- P08 Postharvest chlorine dioxide treatment for quality management of white asparagus (*Asparagus officinalis* L.)  
*Karin Hassenberg, Susanne Huyskens-Keil, Werner B. Herppich*
- P09 Comparison of advanced non-destructive methods to classify healthy and diseased onions  
*Md. Nahidul Islam, Merete Edelenbos*
- P10 Agricultural environment information monitoring by using unmanned aerial vehicle  
*Jeyeon Kim, Yoshiki Orikasa, Kazuya Kanda*
- P11 Basic research of the acquisition of biological information towards the construction of agricultural support system  
*Kazuya Kanda*
- P12 Influence of nitrogen application on ascorbic acid content in cauliflower cultivars after post-harvest storage  
*Ngwatship Mashabela, Martin Makgose Maboko, Soundy Puffy, Dharini Sivakumar*
- P13 Impact of integrated packaging design approach on the quality and shelf life of fresh-cut cauliflower  
*Ngwatship Mashabela, Oluwafemi James Caleb, Dharini Sivakumar, Pramod Mahajan*
- P14 Combined effects of MAP and postharvest salicylic acid treatment on quality attributes of dill (*Anethum graveolens*) bunches during storage  
*Mehmet Ali Koyuncu, Atakan Güneyli, Derya Erbas, Cemile Ebru Onursal, Tuba Secmen*

- P15 Air circulation management in CA storage of apples based on airflow measurements  
*Ulrike Praeger, Reiner Jedermann, Chanaka Lloyd, Nico Hartgenbusch, Marc Spuhler, Daniel Alexandre Neuwald, Holger Scaar*
- P16 Predictive diagnostics based on gene expression for determining the risk of bitter pit development in apple fruit  
*Mireia Ibanez, Peter Balk*
- P17 Impact of dipping fresh-cut apple slices in different sugar solutions on quality parameters  
*Guido Rux, Oluwafemi James Caleb, Christian Ulrichs, Susanne Huyskens-Keil, Werner B. Herppich, Pramod Mahajan*
- P18 Optimization of apple storage bin for reduced energy consumption in airflow ventilation  
*Holger Scaar, Ulrike Praeger, Robert Reck-Heinrich, Mark Spuhler, Martin Geyer*
- P19 Comparison of plant and soil mapping in *Prunus domestica* L. orchard  
*Jana Käthner, Werner B. Herppich, Jörn Selbeck, Manuela Zude-Sasse*
- P20 Impact of pre-harvest respiratory pattern on post-harvest quality of pear  
*Nicole Brandes, Manuela Zude-Sasse*
- P21 Storage studies with organic 'Galant<sup>®</sup>' apples  
*Daniel Alexandre Neuwald, Cécile Prunier, Marc Spuhler and Jens Norbert Wünsche*
- P22 Plasma processed air (PPA) – an alternative for dry bulk food decontamination? *Uta Schnabel, Jörg Stachowiak, Oliver Schlüter, Mathias Andrasch, Jörg Ehlbeck*
- P23 Effects of postharvest storage on the physicochemical properties of seeded and seedless watermelon  
*Maimunah Mohd Ali, Norhashila Hashim, Siti Khairunniza Bejo, Rosnah Shamsudin*
- P24 The influence of nutrient solution different chemical composition on storage durability and the content of pro-healthy components in cherry tomato cultivated in rockwool  
*Kalina Sikorska-Zimny, Waldemar Kowalczyk, Ewa Badętek, Maria Grzegorzewska*
- P25 Modified atmosphere and humidity packaging of fresh produce: Mathematical modeling and experimental validation  
*Ali Jalali, Grazielle Bovi, Guido Rux, Sadegh Seiedlou, Manfred Linke, Pramod Mahajan*
- P26 Impact of minimal processing on the dynamics of volatile organic compounds emitted from fresh strawberry  
*Oluwafemi James Caleb, Kathrin Ilte, Werner Herppich, Pramod Mahajan*
- P27 Influence of plant nutrition on the fruit quality of tomato  
*Rowena Haase, Natalie Hütter, Maria Kaletta, Valentin Löw, Michael Pflanz, Dirk Jäger, Manuela Zude-Sasse*
- P28 Impact of mixed fruit loading in storage chamber on quality parameters  
*Namrata Pathak, Oluwafemi Caleb, Gabriele Wegner, Cornelia Rauh, Pramod Mahajan*
- P29 Investigation of the packaging influence in the visible-near infrared analysis of fresh-cut *Valerianella locusta* L. leaf and Golden Delicious apple  
*Valentina Giovenzana, Roberto Beghi, Riccardo Guidetti*
- P30 Non-contact monitoring of the firmness of nectarines cv. 'Magique' using VIS-NIR hyperspectral reflectance imaging  
*Sandra Munera, Jose Manuel Amigo, Nuria Aleixos, Sergio Cubero, Pau Talens, Jose Blasco*