

We would like to invite you to **Aimei Wang PhD Defence:**

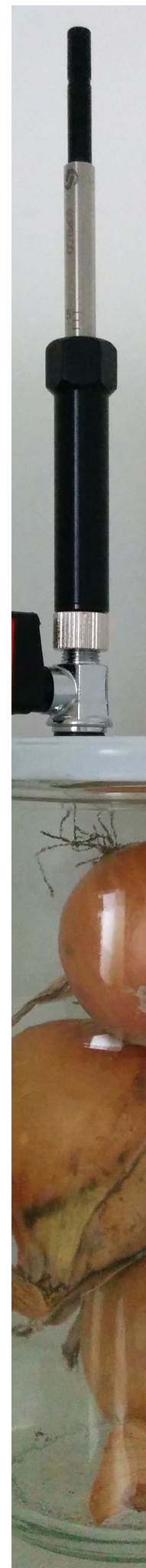
Volatile **organic** compounds as **biomarkers** for detection of **onion quality** during **storage**

23 March 2018. 13.00 - 16.00

AU, Aarslev, Meeting room Cantinen,
finishing with a Reception

Program

- | | |
|---------------|--|
| 13.00 - 13.05 | Welcome by Merete Edelenbos and Marianne Hammershøj |
| 13.05 - 13.50 | Aimei Wang presents: "Volatile organic compounds as biomarkers for detection of onion quality during storage" |
| 13.50 - 14.00 | Break |
| 14.00 - 16.00 | Professor, Dan Funck Jensen, Department of Forest Mycology and Plant Pathology, Swedish University of Agricultural Sciences
Associate Professor, Mikael Agerlin Petersen, Department of Food Science, Copenhagen University
Associate Professor, Marianne Hammershøj (chairman), Department of Food Science, Aarhus University |
| 16.00 | Reception |



PhD project appetizer

During her studies, Aimei Wang researched volatile organic compounds from onions of different cultivars, onions stored at different conditions over the storage period, onions having different infection levels by inoculating onions with *Fusarium oxysporum*, and also pure cultured pathogens. The research revealed that volatiles change over storage time and specific volatiles can be detected from infected onions. The release of volatiles were quantitatively related with levels of infection and fungal biomass. By the volatile method, diseased onions could be differentiated into mild, medium and heavy *F. oxysporum* infection.

The new research findings contribute to an understanding of how onions talk through volatile emission when they are healthy or diseased. The new findings may contribute to the development of a fast and automated volatile method to detect diseases and limit storage losses in onions.

Main supervisor: Associate professor Merete Edelenbos, Department of Food Science, Aarhus University, Denmark.

Co-supervisor: Senior Scientist, Anders Johansen, Department of Environmental Science, Aarhus University

