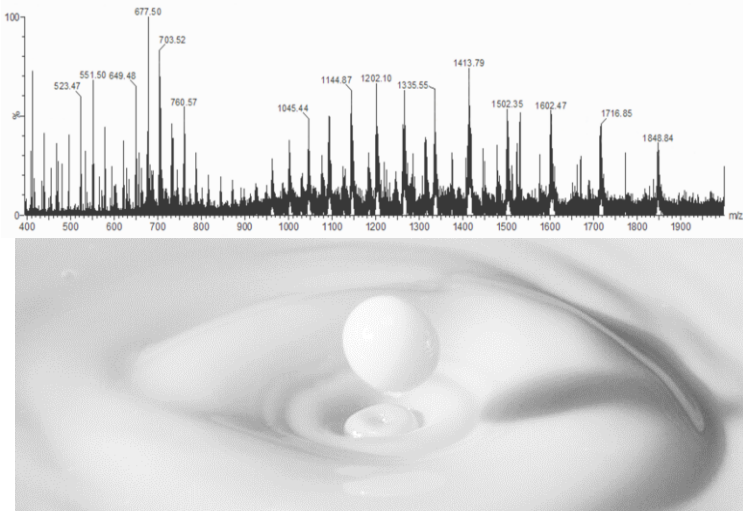


Mass Spectrometry in dairy milk analysis workshop



Tuesday 5 November 2019, 10:30 – 17:30

Worcester Rugby Club, Sixways Stadium, Warriors Way, Worcester, WR3 8ZE

Milk analysis and diagnostics are important tools for animals welfare and food safety. For instance, early diagnosis of mastitis in livestock and rapid detection of the pathogens responsible for this disease are important first steps towards the fight of antibiotic resistance.

Mass spectrometry (MS) as diagnostic tool provides the basis for several applications to the dairy industry, exploiting its ability of rapidly and accurately targeting milk metabolites, lipids, proteins and bacterial consortia. It could be applicable to the field of livestock production and further optimized for high-throughput milk analysis, assessing animal welfare and milk quality through profiling and multiplexing.

The overall aim of this meeting is to build a network between experts from the UK in bovine mastitis and experts in the field of mass spectrometry applied to the analysis of biological matrices. This interaction could be beneficial for the application and development of new methodologies for safety, quality assessment and to tackle antimicrobial resistance. This workshop is aligned with the aims of One Health initiatives in terms of animal and human welfare.

The workshop is limited to 20 participants.

£20 registration fee.

Link for reservation and tickets:

<https://www.eventbrite.co.uk/e/mass-spectrometry-in-dairy-milk-analysis-workshop-tickets-75869253981>

For any further information about registration and payment instructions, please contact Dr. Cristian Piras: c.piras@reading.ac.uk.

twitter @dairymass

Participants who would like to share/discuss their work are strongly encouraged to submit an abstract.

Abstract format: 250 words in a word file to be sent to Cristian Piras c.piras@reading.ac.uk

Program

- 10:30 - 10:50** Registration and coffee/tea
- 10:50 - 11:00** Prof Rainer Cramer, University of Reading, *Welcome and opening remarks*
- 11:00 - 11:45** Prof David Eckersall, University of Glasgow *Proteomics and metabolomics in the investigation of bovine mastitis*
- 11:45 - 12:15** Selected talk from the abstracts
- 12:15 - 13:00** Buffet Lunch
- 13:00 - 13:45** Dr Cristian Piras, University of Reading, *Omic profiling of milk and other biological specimens using liquid AP-MALDI MS*
- 13:45 - 14:15** Round table discussion, *Screening tools for animal welfare assessment, costs and in situ applicability*. Chair Dr. Nick Taylor
- 14:15 - 15:00** Dr Nick Taylor, University of Reading, *Challenges for early diagnosis of mastitis*.
- 15:00 - 15:15** Coffee/Tea break
- 15:15 - 15:45** Selected talk from the abstracts
- 15:45 - 16:30** Prof Chris Reynolds, University of Reading, *Milk components as potential biomarkers of dairy cow nutrition and welfare*
- 16:30 - 17:00** Round table discussion, *Mass spectrometry applicability for animal welfare assessment*
Chair Prof. Rainer Cramer
- 17:00 - 17:30** Future directions; calls for funding; working groups for future collaborations.
Closing remarks.