



**FH Vorarlberg**  
University of Applied Sciences



**[dstl]**



## Spectrometry for Security Applications – First International Workshop

FH Vorarlberg, Dornbirn, Austria, 10<sup>th</sup> – 13<sup>th</sup> February 2019

### Overview

Ion mobility spectrometry (IMS) and mass spectrometry (MS) are key technologies for a wide range of security applications. They provide analytical tools for the high sensitivity operational trace detection of explosives, chemical warfare agents and narcotics, whilst higher resolution mass spectrometers enable lab-based characterization of threat materials including forensic analysis. MS is also increasingly being deployed in the field as technological and engineering solutions emerge to meet MS system requirements, such as robust, low power vacuum pumps. Ionisation is key to both detection and analysis methods, and advances in the use of non-radioactive sources for production of reagent ions and in ambient ionisation for MS have reduced the logistic and regulatory burden and increased applications in the security arena. Following two very successful one-day workshops at the University of Birmingham in 2015 and 2016, this first International Workshop, organized by the Chemical Sciences Security Group (CSSG) of the Royal Society of Chemistry and the UK Defence Science and Technology Laboratory (Dstl), will bring together scientists and technologists from academia, industry and government in an informal setting to network and share recent advances in areas such as PTR-MS, ESI-MS, IMS and MS for security applications. The aim is to facilitate closer collaboration in this field and improve the exploitation of novel concepts.

### Keynote speakers

#### [Prof Ruth Morgan](#)

Director, UCL Centre for the  
Forensic Sciences  
Professor of Crime and Forensic  
Science  
University College London

#### [Prof Gary Eiceman](#)

Department of Chemistry and  
Biochemistry  
New Mexico State University  
Centre for Analytical Science  
Loughborough University

#### [Dr David Atkinson](#)

Pacific Northwest National  
Laboratory  
US Department of Energy

### Location

The Workshop is being co-hosted by the Institute for Breath Research, University of Innsbruck, and the FH Vorarlberg, University of Applied Sciences. Dornbirn is situated in the beautiful Vorarlberg region of Western Austria near Lake Constance, just a few kilometres from the Swiss border. Dornbirn is 9km (5 miles) from the ski resort of Bödele which offers direct access to 16 individual pistes, served by 12 ski lifts. There are excellent and fast train connections from many nearby major cities, including Zurich, Munich, Innsbruck and the famous ski resort of St Anton.



## Registration

The registration fee is €200 to include an evening meal on Monday night, a Workshop dinner and coffee/tea breaks. To register please go to <http://veranstaltungen.fhv.at/sfs> by the **15th January 2019**.

## Abstracts

Abstracts are invited on the applications of MS, IMS and related spectrometric techniques to all areas of security, resilience and crime reduction, including (but not limited to) explosives, chemical agent and narcotics detection; forensic science; counterfeiting; food and water security; emergency response; border protection.

Please email the Chair to request an abstract template and submit abstracts to the Chair and Co-Chairs. Please indicate your preference for an oral or poster presentation.

## Organising committee

Dr Matthew Brookes (Chair)  
Dstl Fellow  
Energetics Analysis Group  
Counter-Terrorism and Security Division  
Defence Science and Technology  
Laboratory (Dstl)  
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## Accommodation

As a guest of the Fachhochschule Vorarlberg you will be able to get special rates at Hotel Krone <http://en.kronehotel.at/>. When booking with the Hotel Krone, please state "Gast der Fachhochschule Vorarlberg". There are also many other hotels in Dornbirn and the surrounding area. Please e-mail Prof. Unterkofler if you need any assistance.

## Programme

Times	Sunday 10 <sup>th</sup> February	Monday 11 <sup>th</sup> February	Tuesday 12 <sup>th</sup> February	Weds 13 <sup>th</sup> February
0700 – 0830		Breakfast (hotels)	Breakfast (hotels)	Breakfast (hotels)
0830 – 0930		<b>Keynote</b> Prof Ruth Morgan	<b>Keynote</b> Dr David Atkinson	<b>Keynote</b> Prof Gary Eiceman
0930 – 0945		Coffee break	Coffee break	Coffee break
0945 – 1045		<b>Presentations #1</b> (3 x 20 mins)	<b>Presentations #4</b> (3 x 20 mins)	<b>Presentations #6</b> (3 x 20 mins)
1045 – 1100		Coffee break	Coffee break	Coffee break
1100 – 1200		<b>Presentations #2</b> (3 x 20 mins)	<b>Presentations #5</b> (3 x 20 mins)	<b>Presentations #7</b> (3 x 20 mins)
1200 – 1800		Networking/ Free time	Networking/ Free time	Close
1800 – 1900	Registration	Evening meal	<b>Posters #2</b>	
1900 – 2000	Networking	<b>Posters #1</b>	Workshop dinner	
2000 – 2100		<b>Presentations #3</b> (3 x 20 mins)		
2100 – 2300		Networking		