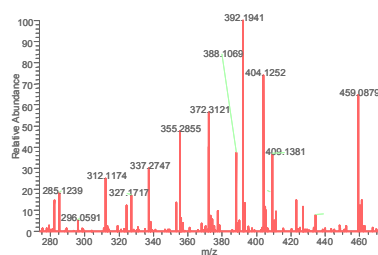
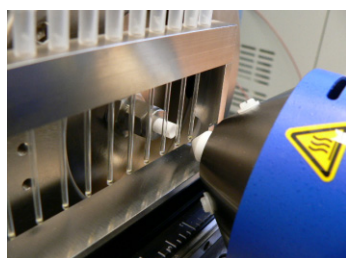


Application of ambient mass spectrometry for the analysis of contaminants/residues in food: Seminar and training

April 26–27, 2010



Organised by Department of Food Chemistry and Analysis of The Institute of Chemical Technology, Prague, Czech Republic

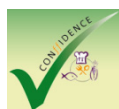
Cooperating institutions: The Food and Environment Research Agency, Sand Hutton, UK
and
RIKILT – Institute of Food Safety, Wageningen, The Netherlands

Supporting institution: KR Analytical Ltd, Sandbach, UK

This training is supported by the European Commission funded Integrated Projects:



FOOD-CT-2004-06988 “BIOCOP (New Technologies to Screen Multiple Chemical Contaminants in Foods)” coordinated by Queen’s University (Belfast, UK)



FP7-211326-CP “CONfIDENCE (Contaminants in Food and Feed: Inexpensive Detection for Control of Exposure)” coordinated by RIKILT – Institute of Food Safety (Wageningen, The Netherlands)

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Programme

April 26 (Monday)

- 09:30 Welcome
- 09:35 **Lectures**
Prof. Dr. Jana Hajslova: Ambient mass spectrometry in residue analysis, Institute of Chemical Technology, Prague, Czech Republic
Richard Fussell: The application of Ambient Solids Analysis Probe (ASAP) – TOF-MS for the rapid analysis of food contaminants/residues, The Food and Environment Research Agency, Sand Hutton, UK
Prof. Dr. Michel Nielen, Dr. Hans Mol: DESI–MS in food contaminants control, RIKILT – Institute of Food Safety, Wageningen, The Netherlands
Dr. Brian Musselman: Operation of DART source – how it works and latest developments, IonSense, Inc., Saugus, MA, USA
- 12:00 Lunch
- 13:00 **Practical session I: DART–TOFMS and DART–Orbitrap-MS**
Introduction to the instrumental software, data evaluation, high throughput analysis of pesticide residues and mycotoxins
- 16:00 Discussion
- 16:30 End of the 1st day of the training

April 26 (Tuesday)

- 10:00 **Practical session II: ASAP–Q/TOFMS**
Introduction to the instrumental software, data evaluation, high throughput analysis of pesticide residues and mycotoxins
- 12:00 Lunch
- 14:00 **Practical session III: DART, ASAP**
Maintenance of the instruments, troubleshooting
- 16:00 Discussion, summary of the outcomes, performance characteristics of ambient mass spectrometry methods in residue analysis
- 16:30 End of the 2nd day of the training

Application of ambient mass spectrometry for the analysis of contaminants/residues in food: Seminar and training

AIM

This training course will provide participants with knowledge in the application of ambient mass spectrometry for the rapid analysis of food contaminants (e.g. pesticide residues, mycotoxins). The benefits and limitations of a number of different ambient mass spectrometry techniques will be discussed, including Direct Analysis in Real Time (DART) and the Atmospheric Solids Analysis Probe (ASAP).

DESCRIPTION

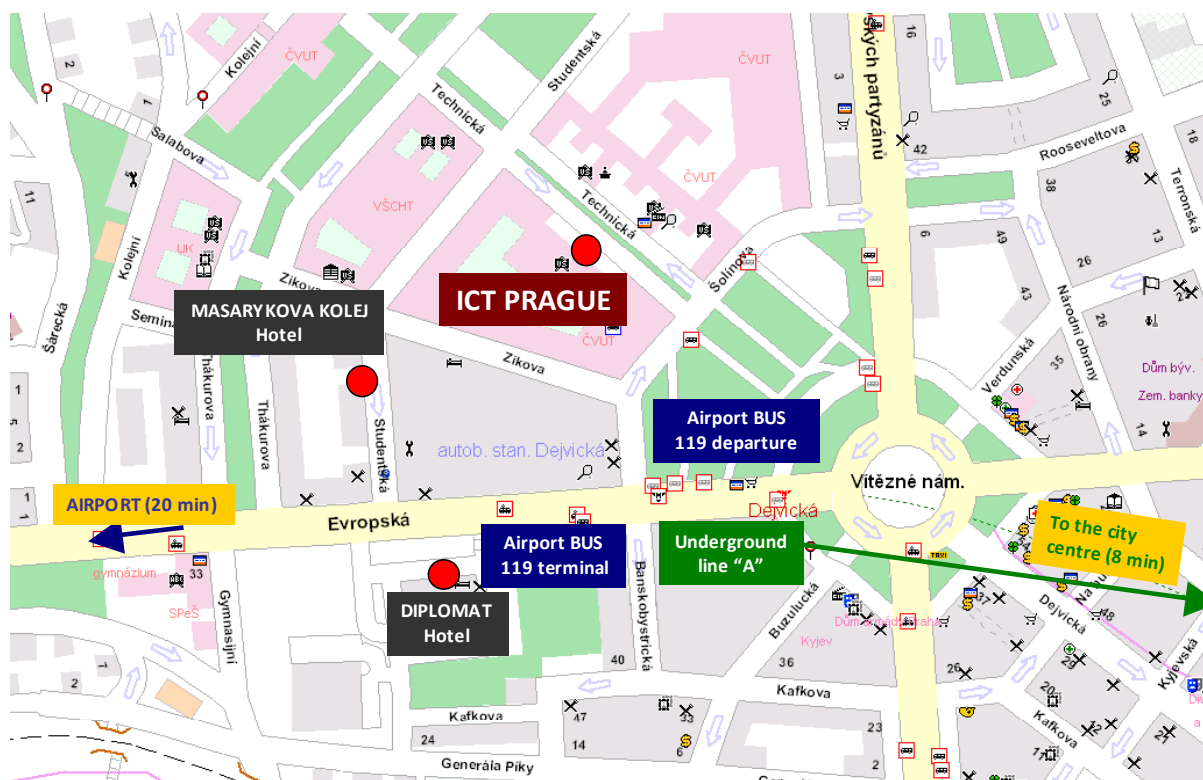
The training will focus on the theory and practical application of

- DART coupled to a high-resolution mass spectrometer (time-of-flight, TOFMS or orbitrap-MS), and
- Atmospheric Solids Analysis Probe (ASAP) coupled to a quadrupole/TOFMS.

DART and ASAP are representatives of new types of ion source working under ambient conditions. As ambient mass spectrometry techniques often require no or minimal sample preparation the overall analysis times can be reduced to a few minutes. Furthermore, use of the high-resolution MS for accurate mass measurement provides information of elemental composition and hence the identification of target analytes and possible identification of “unknown” contaminants.

VENUE

Training course will be organised at the Department of Food Chemistry and Analysis of the Institute of Chemical Technology, Technická 3, Prague, Czech Republic.



THE AUDIENCE

The training will be divided into the lectures and practicals and will be aimed at scientists with at least basic knowledge in mass spectrometry techniques and residue analysis.

Before the start of training course, trainees will receive handouts (papers, lectures, etc.) to provide them preliminary information about the scope of the training.

CONTENT OF SEMINAR AND TRAINING

The training will be given by experts in the field of ambient mass spectrometry and will involve:

- Overview of the ambient mass spectrometry based methods most commonly used in residue analysis
- Providing a practical session including sample preparation, DART and ASAP analyses, introduction to the instrumental software, data evaluation, maintenance of the instrument, troubleshooting
- Discussion

OUTCOME

Following training, trainees will be expected to have a basic knowledge of ambient mass spectrometry and its application in residue analysis.

SATELLITE WORKSHOPS

During the training, satellite workshops will be organised by the IonSense, Inc./KR Analytical Ltd., Waters, and Thermo.

CLOSING DATE

The closing date for registrations is April 10, 2010.

ACCOMMODATION

The participants are responsible for making their own travel/accommodation arrangements. Nevertheless, the organisers recommend following hotels/hostels for accommodation:

*Diplomat Hotel *****

Evropská 15, Prague 6, Czech Republic (<http://www.diplomathotel.cz/en/home/>)

*Masarykova kolej ****

Thákurova 1, Prague, Czech Republic (<http://www.hostelprague.cz/prague-cheap-hotel.html>)

or contact Mrs. Prihodova at prihodova@suz.cvut.cz, phone no. +420 233 051 237; +420 233 051 237

Other links to find out an accommodation in Prague:

<http://www.pis.cz/en/prague/accommodation>

<http://www.hotelscombined.com/City/Prague.htm>

<http://www.hotelsprague.cz/>

<http://www.guideprague.com/>

Low cost accommodation (hostels):

<http://www.czech-inn.com/>

<http://www.miss-sophies.com/>