



## **“X Ion Mobility Spectrometry: Theory and Applications”**

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### **Course contents:**

The fundamentals of ion mobility spectrometry (IMS) incl. different ionization sources and coupling with pre-separation will be discussed in detail. Various sampling techniques will be presented to enable understanding of the specific applications. The complex data obtained from IMS coupled with pre-separation needs thoroughly adapted evaluation algorithms and tools to support the involved persons. Finally, significant exemplary applications in the fields of process control, food quality and safety, search and rescue and in medicine for non-invasive diagnosis and therapy control will demonstrate the potential of this method which has high potential with regard to mobility and miniaturization.

### **Syllabus of the lecture:**

1. Basics of Ion Mobility Spectrometry
2. Pre-Separation Techniques
3. Sampling
4. Qualitative and Quantitative Data Evaluation
5. Applications
  - a. Process Control
  - b. Food Quality and Safety
  - c. Search and Rescue
  - d. Medical Diagnosis and Therapy Control
6. Mobile and Miniaturised Instruments



<b>TERMINY WYKŁADÓW</b>			
<b>Data</b>	<b>Dzień tygodnia</b>	<b>Godzina</b>	<b>Sala</b>
2014-10-13	poniedziałek	9.15 – 12.00	Luwr (Chemia A)
2014-10-14	wtorek	9.15 – 12.00	Luwr (Chemia A)
2014-10-15	środa	9.15 – 12.00	Luwr (Chemia A)
2014-10-16	czwartek	9.15 – 12.00	Luwr (Chemia A)
2014-10-17	piątek	9.15 – 12.00	Luwr (Chemia A)