



*Selskabet for Analytisk Kemi presents:*

## **New MS techniques in drugs and environmental analysis**

*May 25<sup>th</sup> 2010 15:00 to 17:00, KU-LIFE*

### **LC-MS in Drug Metabolite Identification**

W.M.A. Niessen, hyphen MassSpec, Leiden, the Netherlands, [www.hyphenms.nl](http://www.hyphenms.nl)

After introducing some basic concepts of the identification of drug metabolites with LC-MS, the attention is focussed at various (advanced) LC-MS technologies used in the detection and identification of reactive metabolites and of biologically-active metabolites. Methodologies applied in the analysis of reactive metabolites involve techniques like the use of trapping agents, precursor-ion and neutral-loss analysis modes, SIM- or SRM-triggered data-dependent MS-MS acquisition, stable-isotope labelling, and mass defect filtering. For the analysis of active metabolites, on-line bioactivity screening can be applied. This is illustrated with examples.

### **GC-ICP-MS determination of methyl-mercury in biological samples**

M. M. Larsen, Danmarks Miljøundersøgelser, Aarhus Universitet

The hyphenation of GC and ICP-MS was first shown at NERI in the mid 90ies, but are now commercially available from Agilent with their 7500cs ICP-MS. Problems with the hyphenation and the use for measuring metalloorganic substances are presented. One of the most toxic metallo-organic substances, which are produced in nature are methyl-mercury, a substances that is both toxic and bio-accumulative to extremely high levels in the marine food chain. Results from a screening project for methyl mercury in marine mussels, fish and toppredators, carried out under the Danish national monitoring programme NOVANA, are presented. The future projects and possibilities of using stable isotopes for internal standards discussed.

*The meeting will be held: May 25<sup>th</sup> 2010 15:00 to 17:00  
at KU-LIFE, Thorvaldsensvej 40, 1871 Frederiksberg C  
6<sup>th</sup> floor of block 6, room R645*

*The meeting is free of charge, no registration required!*

*Coffee and cake will be served before to ensure a good spirit*