

## **Nano LC for Proteomics – A historical review and future outlook of highest resolution separations**

### **A combined lecture and practical workshop**

Nowadays, proteomics implies the analysis of a large number of molecules in a most comprehensive fashion to describe the dynamics and state of biological systems. Nano LC has historically played a major role within proteomics research.

In this workshop we will provide a historical review of the early years in Nano LC separations where we worked with flow splitters and dedicated flow cells. Over the years this has changed towards dedicated Nano LC systems with full flow control, towards 2-D separations and towards the currently popular long gradients with 50 and 75 cm columns in full Nano UHPLC.

During the workshop we will have breakout sessions to practically look at sample preparation (digestion), set-up of the Nano UHPLC and of course the differences between Nano UHPLC today and Nano LC in the past.

### **Program**

- Introduction - Welcome / Presentation of the Workshop (10 min)
- Session 1 - Simplified protein digestion using SMART Digest (30 min)  
*Hands-on session SMART Digest*
- Session 2 - History of Nano LC (30 min)  
*Hands-on session on the Nano LC*  
*Hands-on session on columns and connectors*
- Session 3 - 2-D or Multidimensional LC (15 min)
- Session 4 - Nano UHPLC (15 min)  
*Review of the samples*
- Session 5 - Trouble shooting Nano UHPLC (20 min)

Your guides through this workshop are:

**Alexander Schwahn**, European Sales Support Expert

**Robert van Ling**, European Sales Support Expert

**Thomas Jakoby**, Application Specialist