

Vendor Seminar – Thursday, July 2, 2009, 14:15 – 15:15 hrs, Lecture hall: KR 6

VWR International: VWR-Hitachi HPLC systems /Optimum choice for fast and ultra-fast HPLC / VWR EcoPure, the new column line from VWR

AGENDA

1 Open Systems: VWR-Hitachi HPLC systems controlled by multiple laboratory data systems

Presentation done by Wolfgang Volmer during 30 minutes

During the last few years users of HPLC systems more and more invest into the potential of controlling their HPLC instrumentation with the same data system software. The user benefits from one single cost-effective solution to support the analytical work, therefore minimizing software training requirements and simplifying the exchange of technical staff.

Today, a lot of corporations have standardized on one data system and benefit from flexible software plans and upgrade management to further reduce the IT efforts and reduce the total-cost-of-ownership.

Laboratories throughout the world use the LaChrom Ultra and LaChrom Elite systems from VWR-Hitachi.

The instrument control software for the Hitachi HPLCs are add-on software packages (Drivers) for chromatography data systems from different vendors.

Hitachi LaChrom Ultra and LaChrom Elite are now supported in all major chromatography software platforms, as well as mass spectrometry software packages, such as

- Agilent EZChrom Elite
- Waters Empower 2
- Dionex Chromeleon
- Bruker HyStar
- Applied Biosystems Analyst

EZChrom Elite is a trademark of Agilent Technologies Inc.
Empower 2 is a trademark of Waters Corporation
Chromeleon is a registered trademark of Dionex Corporation.
HyStar is a trademark of Bruker Daltonics Inc
Analyst is a registered trademark of Applied Biosystems Inc.

2 Optimum choice for fast and ultra-fast HPLC - Two ways to achieve the same goal (2µm particles or monolithic silica)

Cosima van Heimendahl - during 15 minutes

This lecture describes fast HPLC with Purospher® STAR RP-18 endcapped 2µm and 3µm UHPLC columns and Chromolith® monolithic HPLC columns. The advantages and limitations of fast HPLC with small particles and monolithic columns are demonstrated very clearly.

Hibar® HR Purospher® STAR RP-18 endcapped, 2µm UHPLC columns are ideal for ultra fast chromatography applications. The most important attribute of these columns is speed with highest resolution, performance and stability at the same time.

Chromolith® monolithic HPLC columns are best for ultra-fast applications at lower pressure using UHPLC or standard HPLC systems, and applications with acetonitrile or methanol as mobile phase. Even problematic samples with a complex matrix can be analysed on Chromolith® HPLC columns with reduced sample preparation. Thanks to their robust monolithic silica skeleton, the lifetime of Chromolith® HPLC columns is much longer than for particulate columns, thereby savings both time and money.

3 VWR EcoPure™ - the new column line from VWR

Cosima van Heimendahl - during 15 minutes

VWR EcoPure™ - the new column line from VWR

Excellent price-performance with a wide variety of phases and applications.

This lecture describes the numerous opportunities of ultra fast HPLC with 1,5 µm VWR EcoPure™ columns. Ultra fast separation (95 % faster with 4x higher sensitivity compared to 2,1x 150 mm; 5µm column) combined with superior efficiency, excellent stability for long column lifetime and a wide variety of phases signalizes the VWR EcoPure™ columns.

Especially non validated areas like universities are interested in different RP-C18 phases which elute neutral, non-polar compounds faster and retain polar compounds longer. They are also interested in the normal silica phases and HILIC phases.