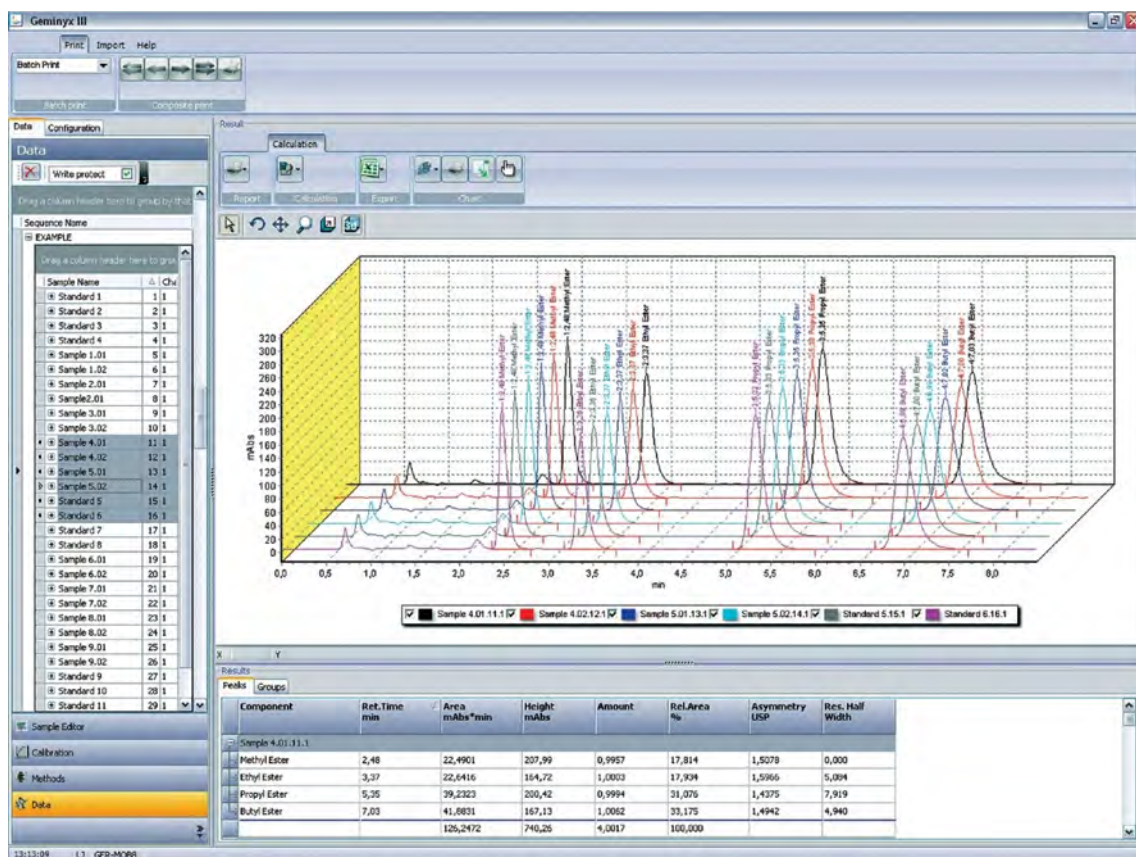


The new Geminyx III Data System

The transformation of complex chromatographic raw data into *quantitative* and *qualitative information*

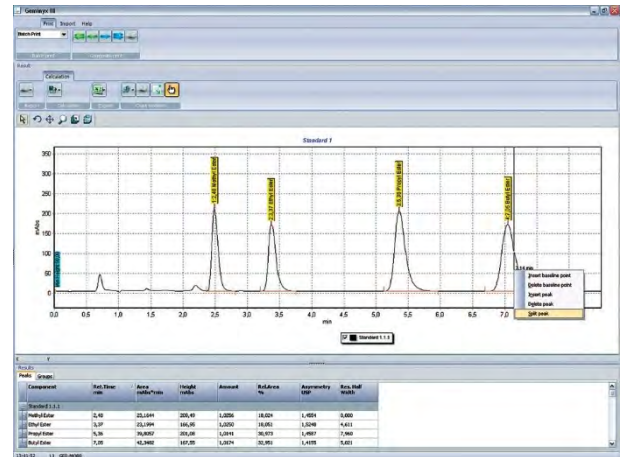


Chromatogram Comparison

- Automatic peak detection and integration without time-consuming parameter selection
- With a single mouse click page from sample to sample in a sample sequence and, if required, optimize using the graphical editor
- Ergonomic display of chromatograms and calculated results
- Automatic peak purity calculation and spectral library search based on high resolution spectra from the diode array detector
- Flexible report generator for professional design of the report
- Data export in all common formats
- Data import from older data system versions of KromaSystem 2000 and Geminyx
- Geminyx III CFR available – fully 21 CFR part 11 compliant

Correct integration – checked with a few mouse clicks

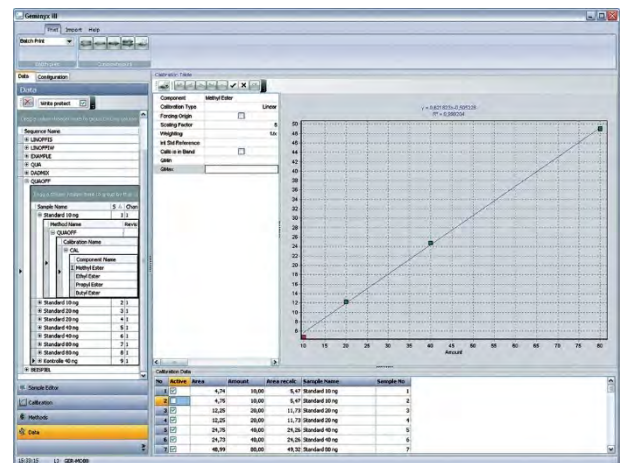
- Automatic integration without time-consuming parameter selection using proven algorithms
- Page from run to run through complete sample sequences and zoom in on details of individual runs
- Using simple mouse clicks easily reset peak limits, re-define the baseline or separate peak shoulders if required using the graphical editor
- The impact of the changed integration is immediately visible in the report
- Once all runs in a sequence have been checked the complete sequence can be printed as a summary report



Graphical Editor

Calibration – from area value to quantitative result

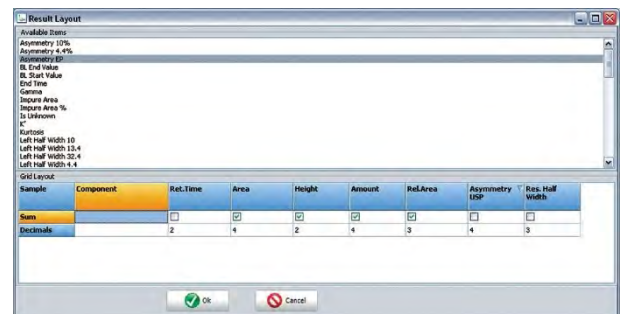
- All required calibration functions used in the chromatography laboratory are supported: linear functions, polynomials up to a degree of 5, exponential, Power Fit or logarithmic
- Outliers are recognized by the system and can, using tightly defined limits, be excluded from the calibration function calculation
- Manual removal of a calibration point is also possible with a simple mouse click
- Weighting permits focusing on either high or low concentrations
- Automatic calculation of the samples with averaging of all standards, after sequential calibration or using bracketing



Calibration Curve

Selection of the calculated parameters for the report

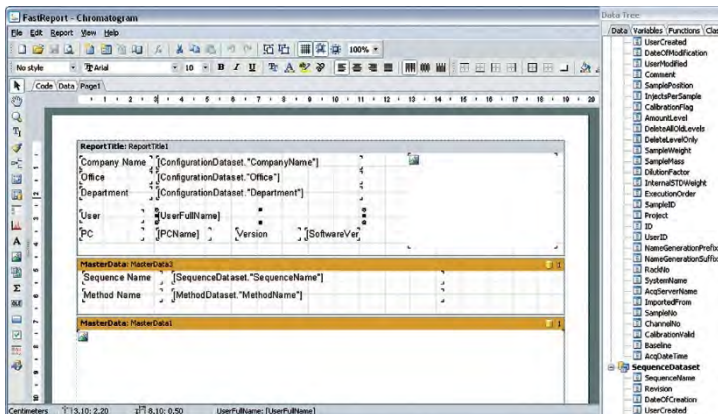
- All parameters usually used in the chromatography laboratory are automatically calculated by the system
- A variable editor permits the definition of additional application-specific parameters
- For a specific application the required parameters are simply moved to the desired position in the column using drag & drop and the number of decimal places defined
- In this way the columns required in the result report are easily defined as a part of the method



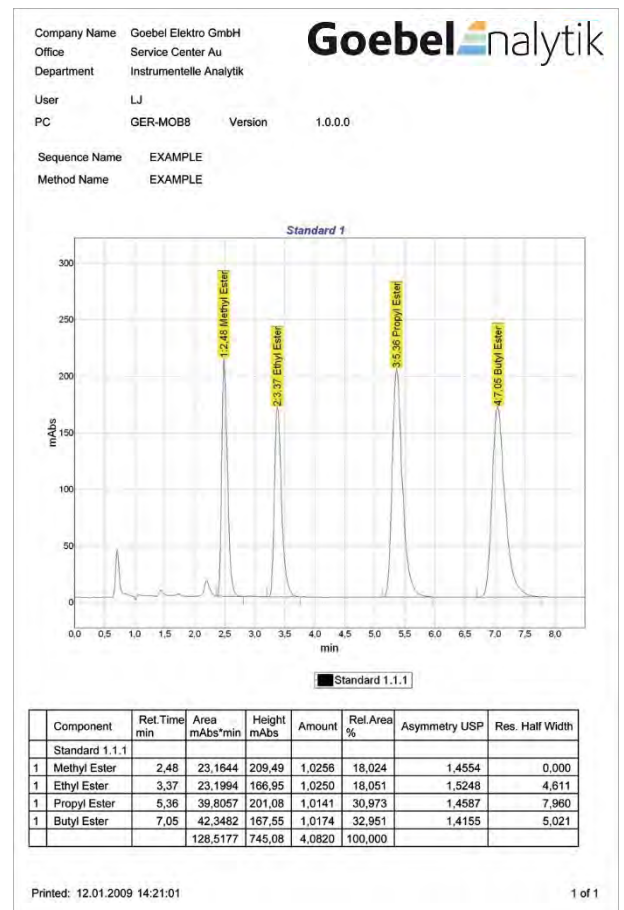
Selecting Report Columns

Free report design

- A completely flexible report generator permits the free design of templates
- All elements can be freely positioned and formatted
- Insert and format free text, method or sequence variables
- Insert and format graphical objects
- Insert your own graphical objects, e.g. company logos
- Chromatograms in a sequence can be defined as overlays or single reports for printing



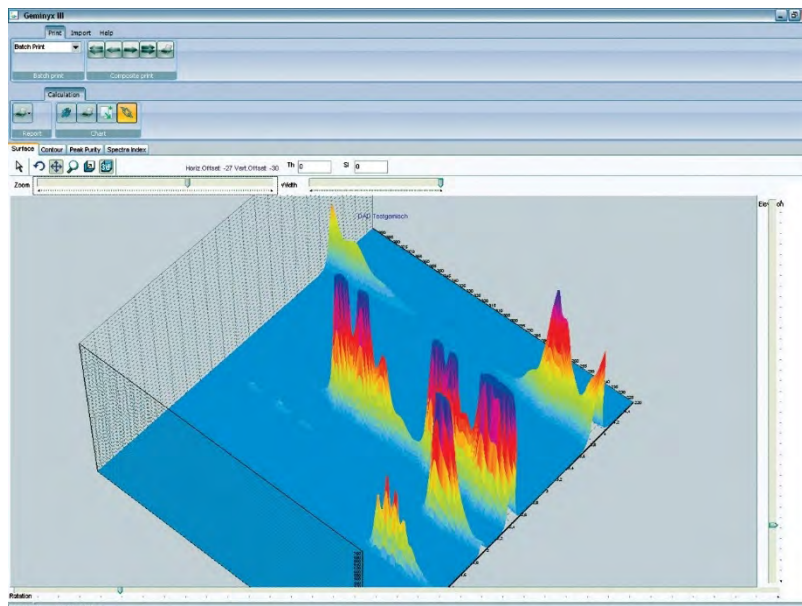
Report Generator



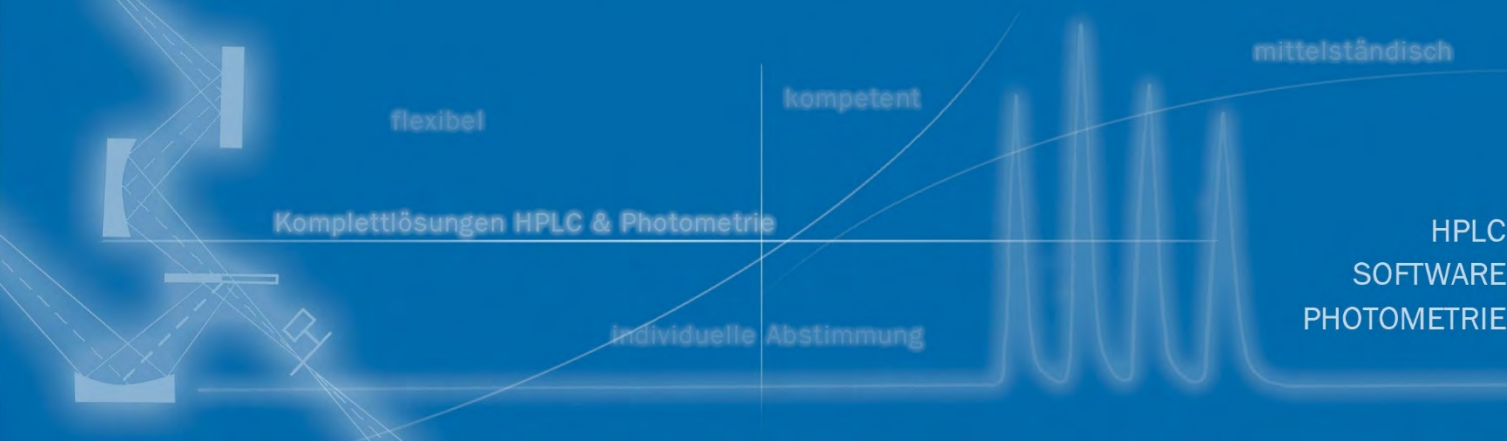
Sample Report

Spectral information from diode array detectors

- High resolution spectra from the Celeno II diode array detector supply, in addition to the quantitative information from a chromatogram channel, significant qualitative information regarding peak purity and component identification
- A chromatogram can be extracted at any desired wavelength
- The spectrum is permanently available as a source of information for qualitative statements

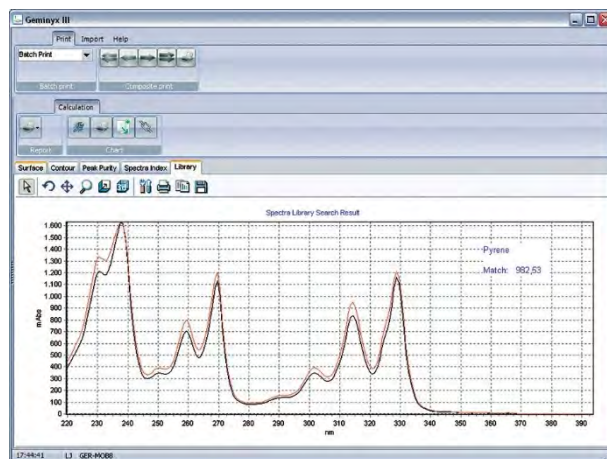


3d Display



Spectral library search

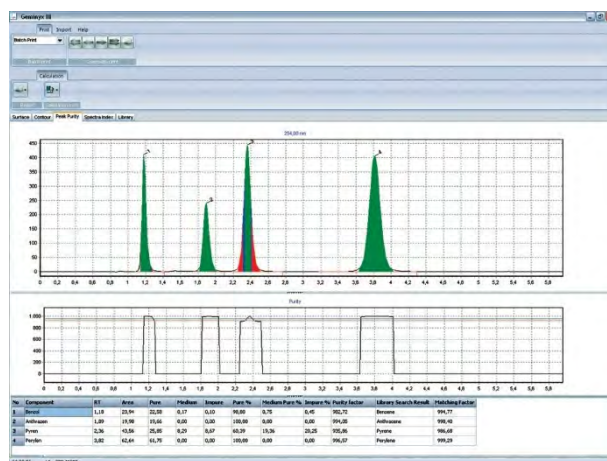
- Spectral libraries, either self-created by analysis of pure substances or commercially available versions, can be used
- A spectrum, manually extracted from the contour plot at any point in time, can be used in the library search
- For automatic determination the apex spectrum is compared with the library as defined in the method
- High resolution spectra from the DAD in combination with the excellent Geminix data system algorithms lead to secured information regarding the identity of a component



Clear Component Identification

Calculation of peak purity

- Compensation of the solvent baseline in gradient runs
- All spectra are normalized and compared with the apex spectrum of a peak
- Graphical display together with numerical calculation of the peak areas within the pre-defined purity limits
- Qualitatively significant information is thus obtained regarding the purity of a component in the chromatogram



Quality Information about Identity and Purity

For more information please contact:

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