

# GERSTEL

MAKING LABS WORK



## GERSTEL Multi-Position Evaporation Station <sup>m</sup>VAP

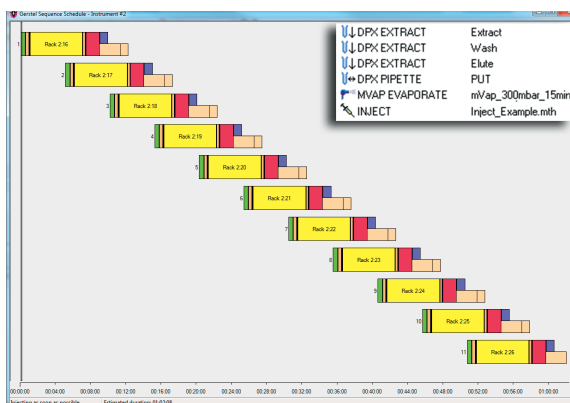
Fully automated solvent evaporation integrated with your sample preparation

The GERSTEL Multi-Position Evaporation Station (<sup>m</sup>VAP) performs solvent evaporation enabling automated sample concentration for lower limits of detection as well as solvent exchange for improved chromatography and LC/MS ionization.

<sup>m</sup>VAP is an option for the GERSTEL MultiPurpose Sampler (MPS): Up to 240 samples\* in standard autosampler vials can be concentrated in batches of up to six. Concentration is performed at user defined temperature, agitation and vacuum levels enabling highly flexible operation under moderate temperature conditions and with minimal analyte loss.

Concentration in the <sup>m</sup>VAP can be combined with a wide variety of sample preparation and clean-up techniques such as SPE, dispersive SPE (DPX), liquid/liquid extraction or filtration with the significant benefit of automated injection of the concentrated sample into a GC/MS or LC/MS system. Every step is controlled by mouse-click using the MAESTRO PrepBuilder. Just one method and one sequence table is needed for the entire process including GC/MS analysis. For LC/MS analysis, only one sequence table is needed.

\* The actual maximum number of Samples can be higher depending on size and configuration of the MPS..



MAESTRO Scheduler view of a dispersive SPE-GC/MS sequence including parallel evaporation and PrepAhead

# mVAP Features and Benefits

## Option for the GERSTEL MultiPurpose Sampler (MPS)

- Integrated sample preparation for GC/MS or LC/MS
- Independent sample preparation as MPS WorkStation

## Efficient concentration of extracts and solutions under controlled conditions

- Improved limits of detection
- Solvent exchange for GC/MS or LC/MS analysis

## Concentration in combination with all sample preparation techniques

- SPE
- Dispersive SPE (DPX)
- Liquid-liquid extraction
- Membrane Assisted Solvent Extraction (MASE)
- Centrifugation
- Filtration

## Reliable results

- Reproducible sample preparation through uniform processing of all samples
- User defined mild evaporation conditions enable maximized analyte recovery
- Condensation-free and safe removal of solvent vapors
- Contamination-free through use of sealed autosampler vials
- Reduced staff exposure to potentially toxic solvents

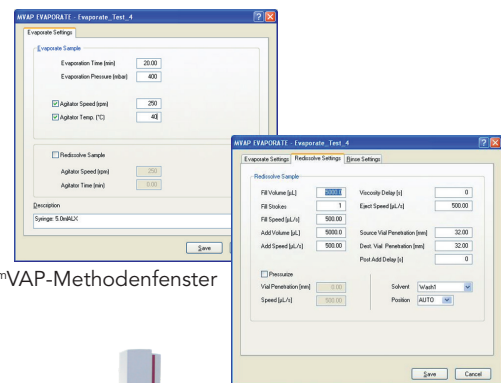
## Maximum efficiency

- Concentration directly from elution/sample vials
- No need for cumbersome manual liquid transfer
- Automated loading of 2 mL, 4 mL and 10 mL vials
- Parallel evaporative concentration of up to six samples

- Fast controlled evaporation through user defined temperature, vacuum and agitation levels
- Efficient PrepAhead overlapping of sample preparation and analysis
- Optimal utilization of the complete analysis system, best possible ROI

## Intuitive control by mouse-click using MAESTRO

- Integrated software control of complete process:
  - Sample preparation steps
  - Evaporation parameters - including vacuum, agitation and temperature
  - Automated solvent exchange
  - GC/MS or LC/MS analysis
- Only one sequence table required
- MAESTRO integration provides single method control
- Interfaces with leading chromatography software packages



mVAP-Methodenfenster

