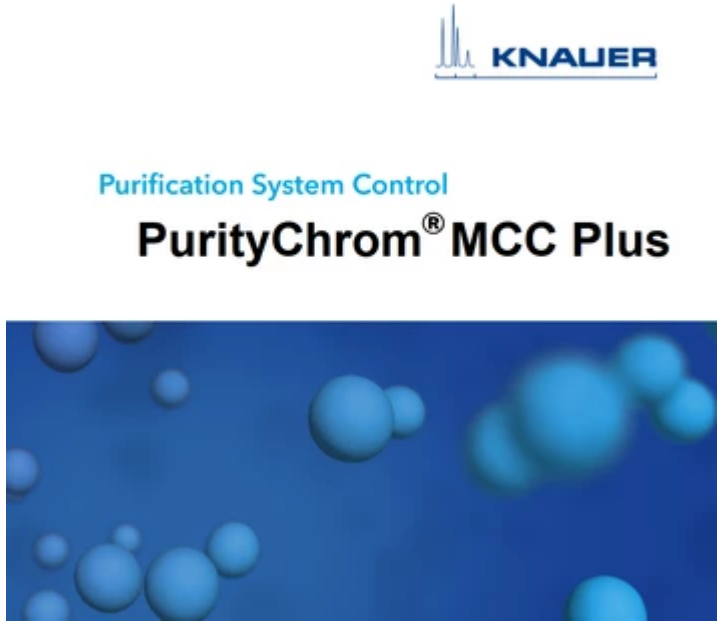
PurityChrom MCC & MCC Plus

PurityChrom® MCC is optimized to be used with simulated moving bed chromatography systems (SMB).The SMB parameter wizard helps you to generate new SMB methods and optimize your parameters while the process is running. With the integrated starting point calculator, you can easily generate your SMB method with the adsorption isotherms of your substances.

PurityChrom® MCC Plus is a powerful software enabling the control of an enhanced number of devices in one LC system. Up to 8 isocratic pumps, 8 flowmeters, 4 single-wavelength UV detectors complemented by one multi-wavelength UV detector, and 4 conductivity monitors can be controlled in one system. Accordingly, PurityChrom MCC Plus can run extended purification systems while enabling a quick overview about the whole system and many options to interfere in processes manually as known from all other PurityChrom packages as well.



ftware packages offer:

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- Free and unlimited number of offline licenses
- 21 CFR part 11 certification

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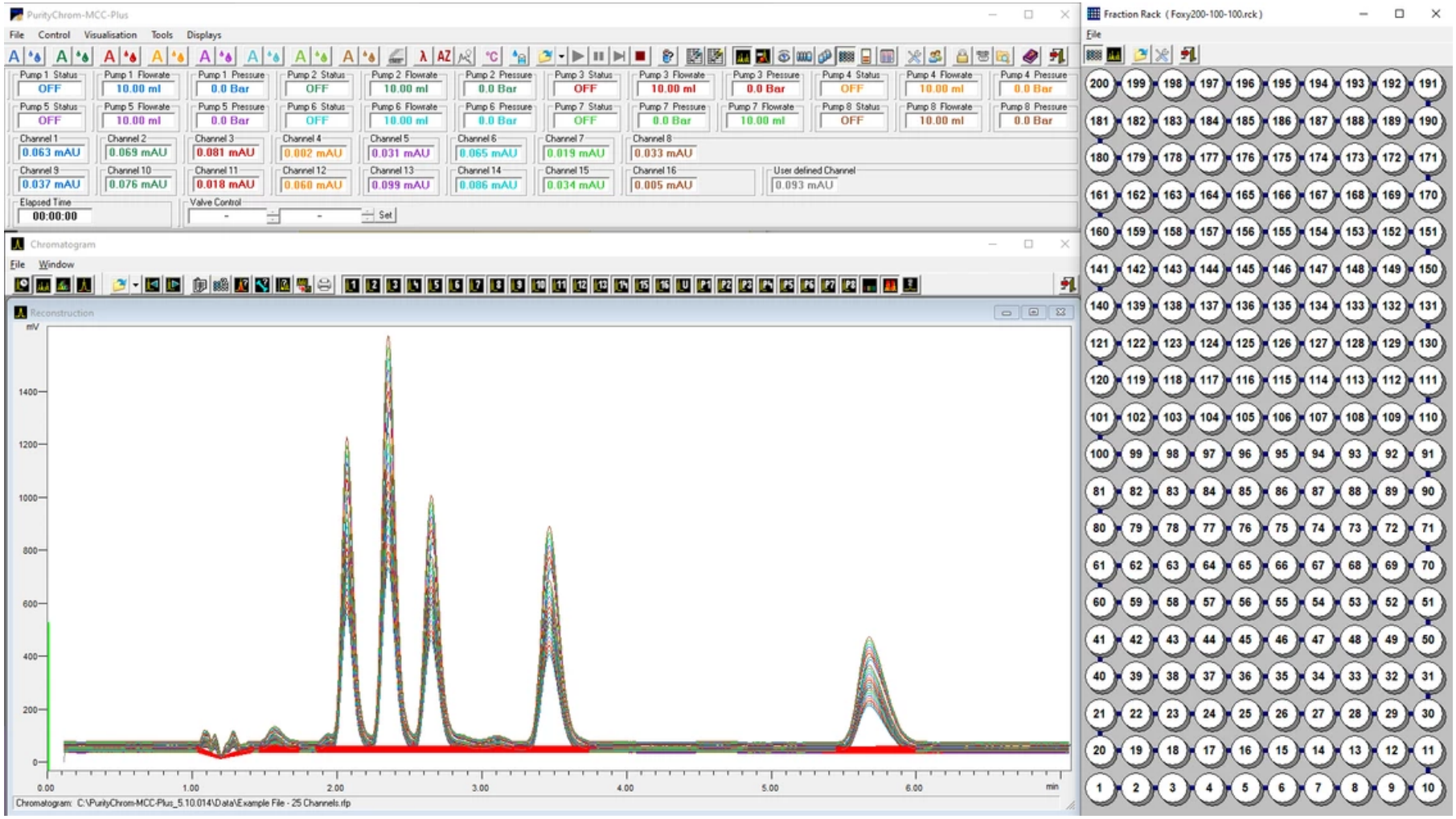

Free demo version of PurityChrom® MCC Plus

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To evaluate if PurityChrom® MCC Plus holds up to your expectations, you can download the free PurityChrom® MCC Plus demo version. Perfect for those who'd like to try before they buy.

Free demo

quick overview about system and running processes

easy adaption of software interface to individual needs

21 CFR part 11 certified

Versatility of PurityChrom MCC (Plus)

... shown in two exemplary fields of application

Automated 3-Step Multi-Column Purification

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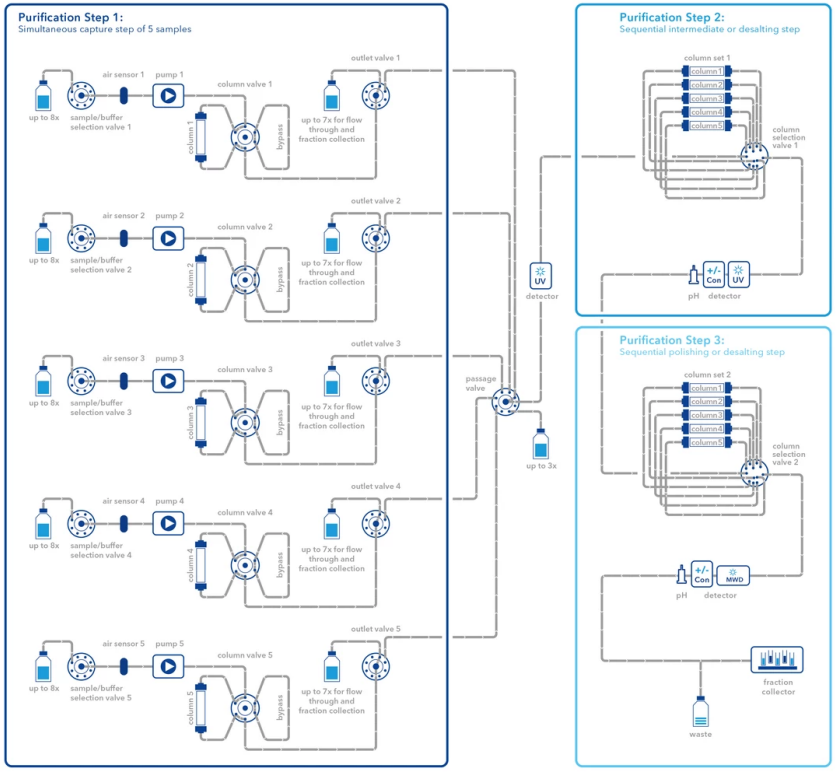

The exemplary flow scheme demonstrates, how powerful this special software version is. PurityChrom MCC Plus is specially designed to control purification systems consisting of a huge number of devices to enable high throughput. Accordingly, it can be used to design an automated three-step purification process, for example:

Purification step 1 - Simultaneous capture step of up to 5 samples

Use the isocratic pumps of your system to load simultaneously 5 samples on your columns to capture the substances of interest. In the case of huge sample volumes, this capture step is the most time-critical point in your purification procedure and thus, simultaneous loading offers an option to save time.

Purification step 2 - sequential intermediate or desalting step

In a second step, the captured sample is eluted and further purified via a second column. The procedure can be triggered by a detector signal in the software.

Purification step 3 - sequential polishing or desalting step

In the last step, a desalting step is performed in your purification which is enabled via a third column set and monitored by conductivity and/or pH. Finally, the purified substance is collected by the fraction collector triggered by data signals or based on the programmed time windows.

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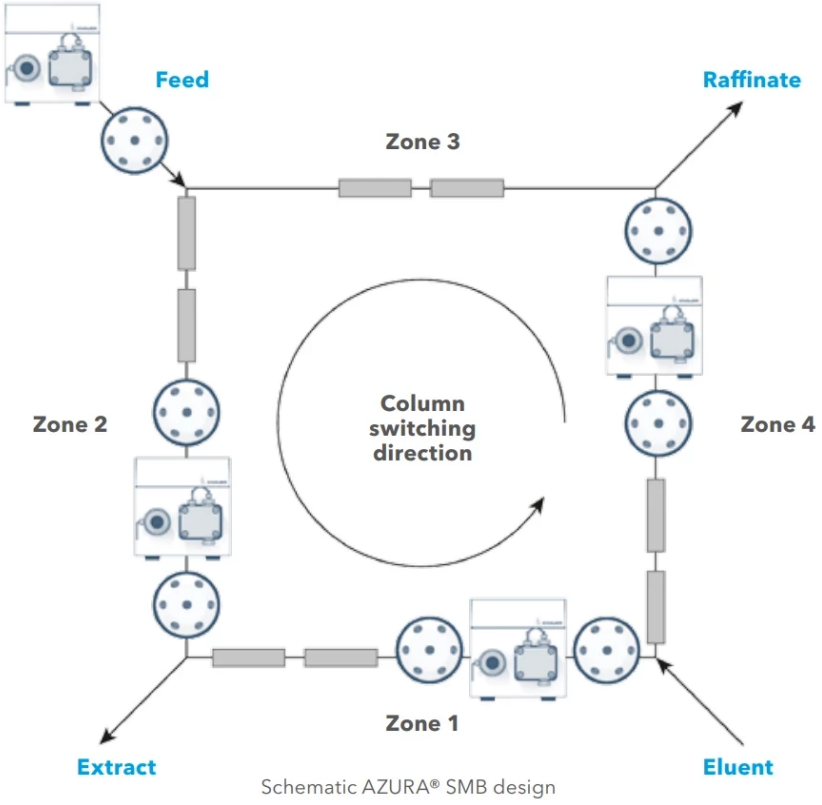
Simulated Moving Bed Chromatography (SMBC)



Schematic AZURA® SMB design

Simulated moving bed chromatography (SMBC) is increasingly applied as a separation technique in the pharmaceutical industry, production of fine chemicals, and in the field of bioengineering.

SMB is a method in process chromatography that enables substance mixtures to be continuously separated and extracted in two fractions. Its efficiency is significantly higher than batch chromatography, through better utilization of the column stationary phase.

Although in principle limited to two fraction separations, each partial fraction can be separated into further fractions by repeated use of the SMB process – down to binary substance mixtures.

Accordingly, a powerful software is needed to monitor and control this continous process. PurityChrom MCC offers a parameter wizard that helps you to generate new SMB methods and optimize your parameters while the process is running. With the integrated starting point calculator, you can easily generate your SMB method with the adsorption isotherms of your substances.

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