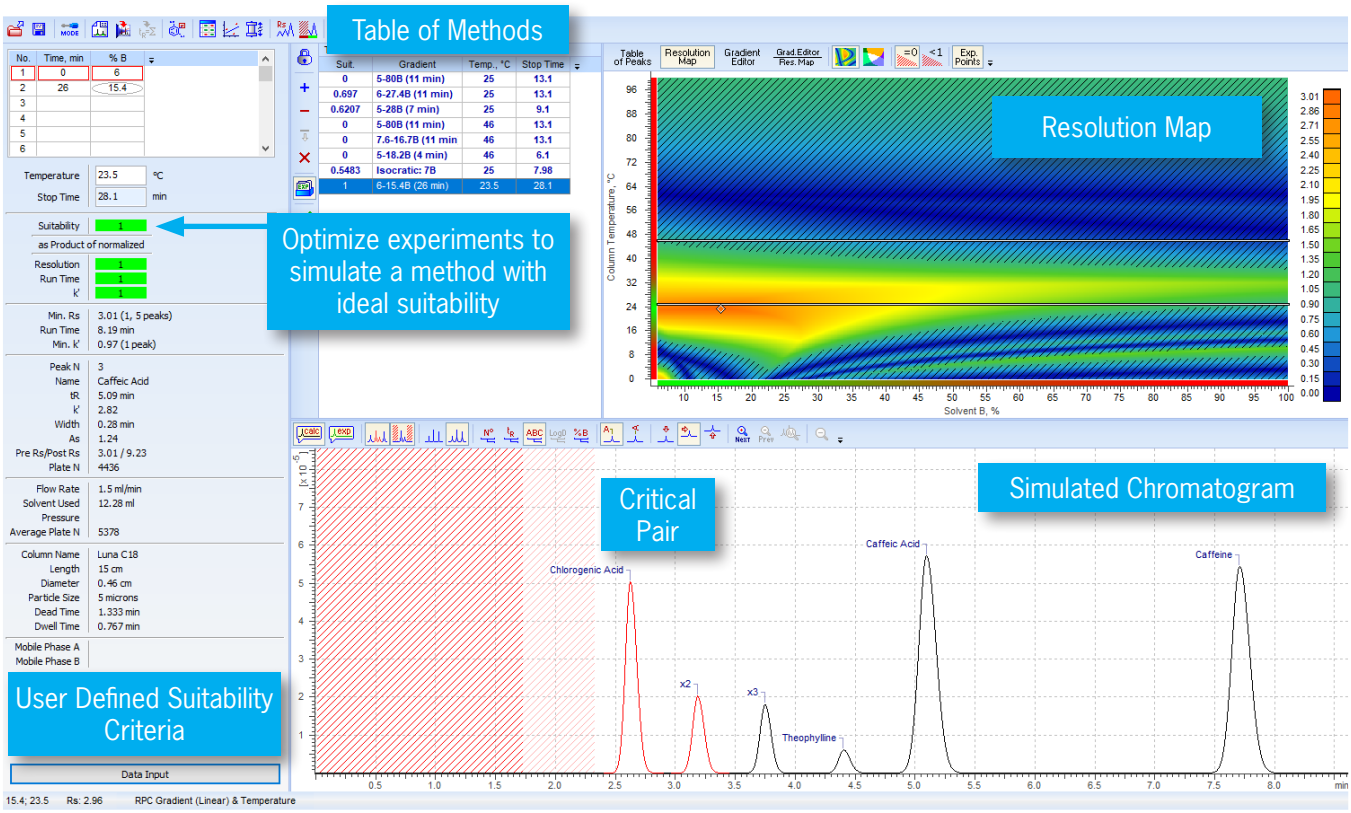
Robust Methods with Fewer Injections

Method Selection Suite

Streamline chromatographic method development by combining **physchem property predictions** with **method optimization tools** to optimize key separation parameters, define better starting conditions, and estimate retention times.



Accurately predict various physchem properties: pK_a, log*P*, log*D*, solubility, and more

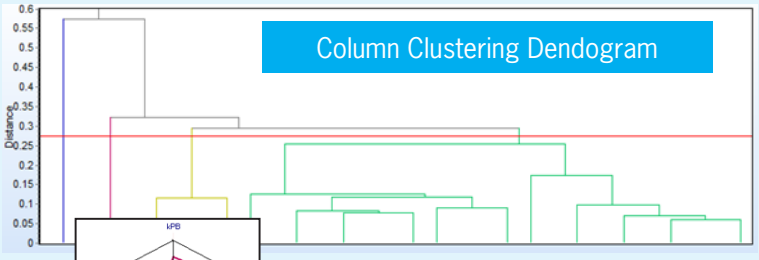
Optimize key separation parameters: gradient, pH, temperature, solvent ratio, etc.

Import and analyze chromatographic data from multiple instrument vendors

- **Follow Quality by Design (QbD) principles** to improve methods, including multivariate optimization and expanding design space
- **Use a variety of predefined models** to optimize separations, such as normal-phase, reversed-phase, HILIC, supercritical-fluid chromatography, etc., or build your own model
- **Predict more suitable** methods by using experimental data and a prediction engine to estimate retention times of target compounds
- **Review and analyze results** using comprehensive method data, color-coded resolution maps, and interactive chromatograms

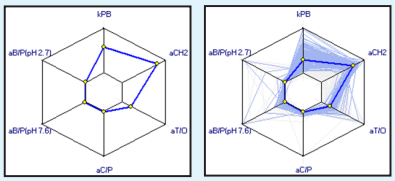
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Select a better starting point



Use the **Column Selection** tool, which includes both vendor and user-generated column lists, to identify the **most orthogonal (dissimilar) columns** prior to screening experiments

Radar Graphs of Selected Columns



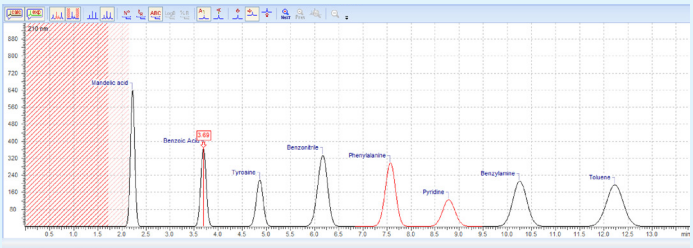
Use the **Column Comparison** tool to visually compare columns according to radar graphs of the **six Tanaka parameters**, and calculate column distance factors (CDFs) to quantify differences

Benefits: • Diversify method screening options, reduce experiment number, and save time
• Improve method selectivity for your target compound classes

Simulate and optimize to develop better-performing methods more efficiently

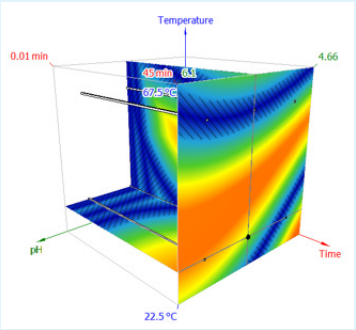
Simulate

Use simulation to generate methods with suitability conditions that better align to success criteria (resolution, run time, retention factor)



Optimize

Use 3D optimization to select the optimal conditions. With 3D maps, visualize areas of greatest resolution and areas that meet user-defined success criteria.



Benefits: • Visualize the predicted impact of changing method conditions on separations
• Directly observe the relationship between specific success criteria and suitability

Ensure a rational strategy

Follow QbD recommendations by selecting, and justifying, all method conditions

QbD Strategy

Effortlessly report results

Quickly export method conditions and separation results to written reports

To learn more about ACD/Method Selection Suite visit
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