What's New in ChemSep™ 6.6

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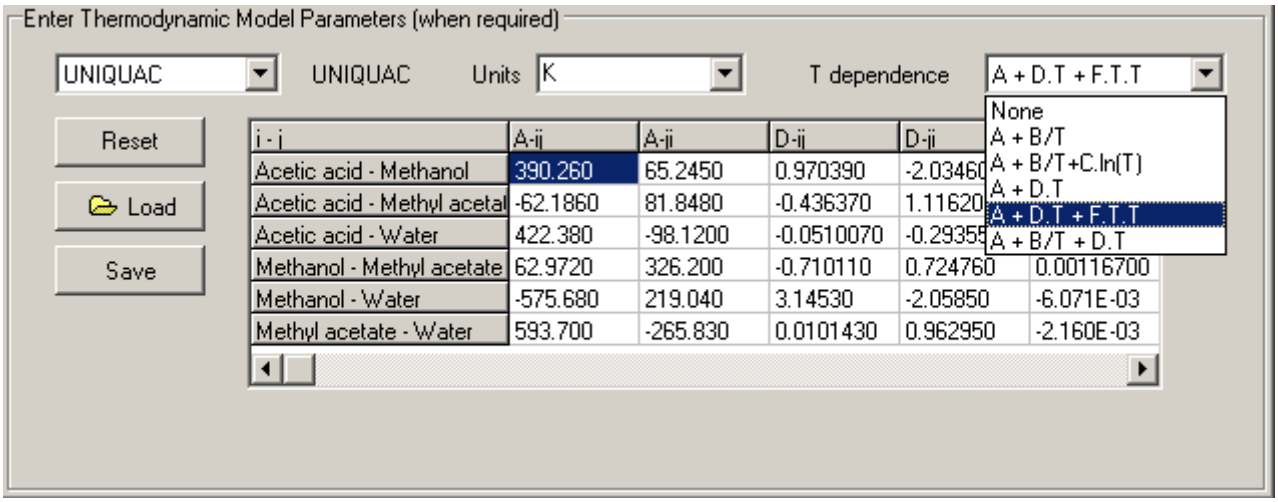
In this document we identify and describe the most important new features in ***ChemSep***.

1. **Back Again: Temperature-dependent interaction parameters for VLE**
2. **Improved: Temperature-dependent properties in the databank manager**
3. **New: Excel export from the physical properties databank management program**
4. **New: Easy comparisons of total reflux measurements with simulation results**
5. **New: GUI can directly load ChemSep columns from COCO flowsheet files**

Back again: Temperature dependent interaction parameters

Temperature-dependent parameters for activity coefficient models can be employed in ChemSep again.

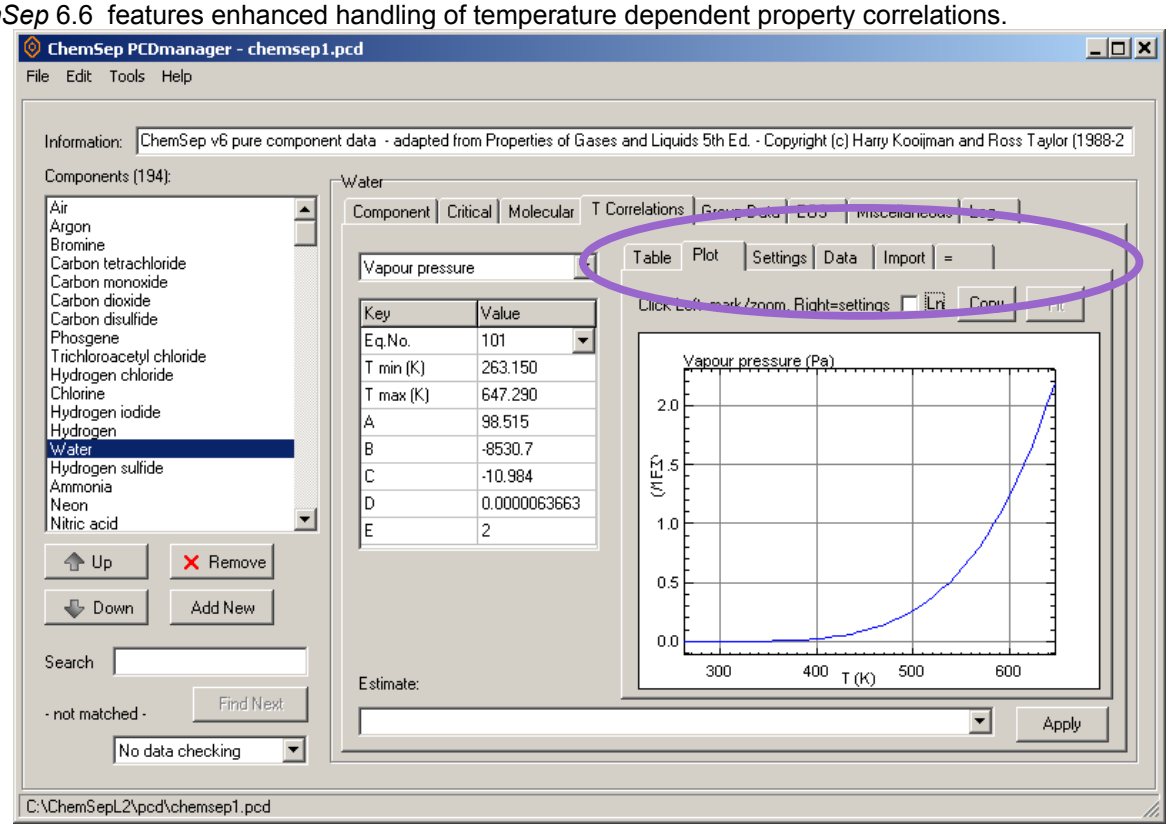
This option is available for the Wilson, NRTL,and UNIQUAC activity coefficient models. The default choice is *None* (meaning the parameters are independent of temperature). To select a particular temperature dependent format click on the expression list that appears in the top-right corner of the illustration below.



Important note: The *Units* in the above represents the units of the parameter calculated from these expressions; it does not refer to the units of the individual constants such as *A*, *B*, etc.

Improved: Properties Data Manager

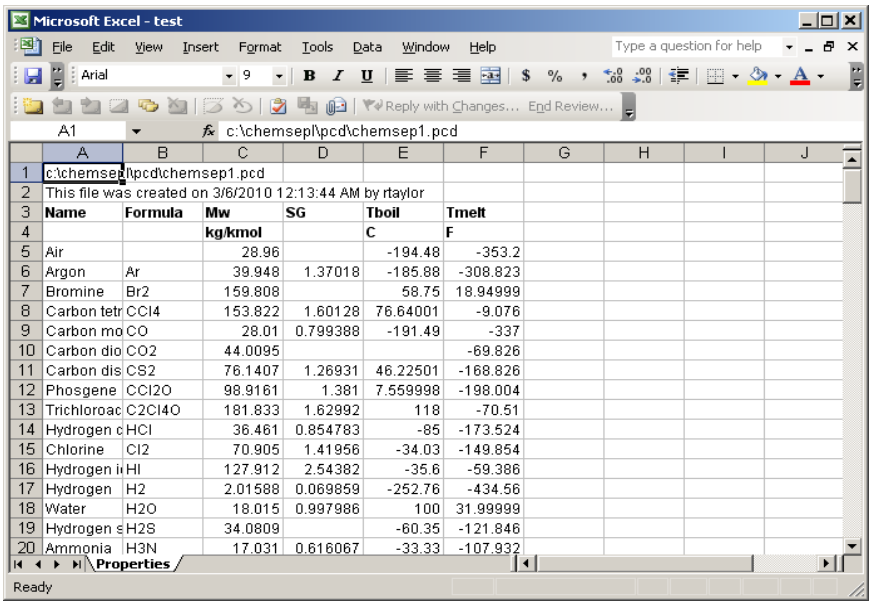
ChemSep 6.6 features enhanced handling of temperature dependent property correlations.



Note the new set of tabs contained within the ellipse in the above screen shot. For more information see www.chemsep.com/downloads/docs/ChemSepTutorial_PCDManager.pdf

New: Extracting Physical Property Constants to Excel

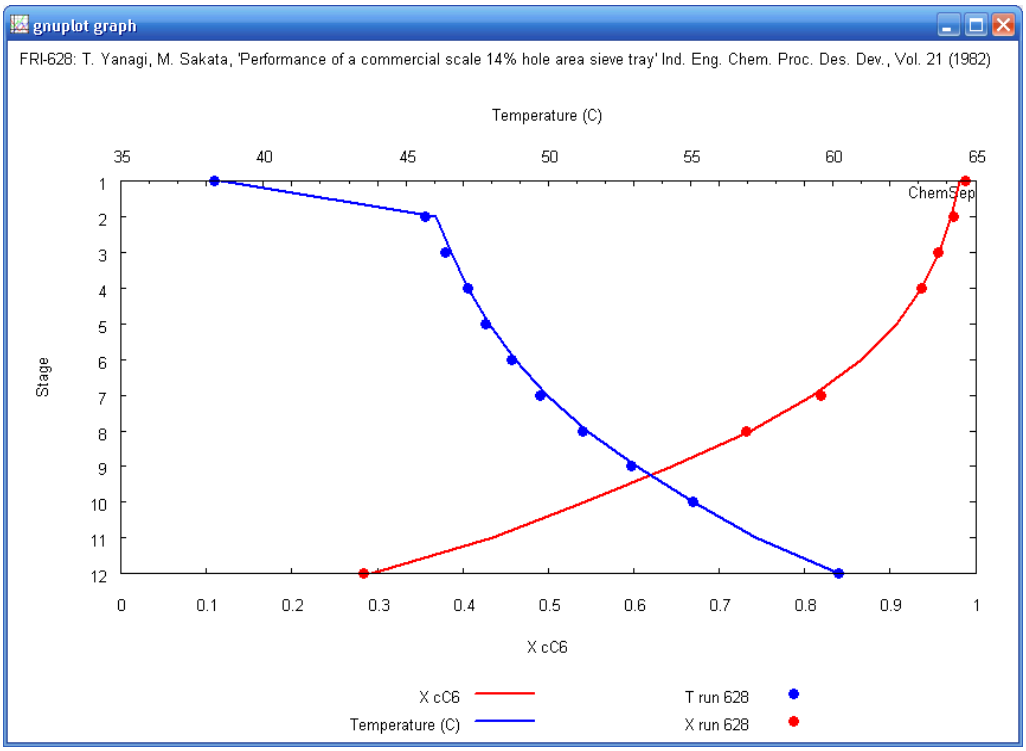
In Version 6.5 we introduced a new and vastly improved capability of exporting simulation input and results to Excel. In version 6.6 we have brought that capability to the physical properties databank management program we call PCDmanager. The illustration below shows a table in Excel created using this new capability.



For more information please see the tutorial at
www.chemsep.com/downloads/docs/ChemSepTutorial_PCDExport.pdf

New: Easy Comparisons of Total Reflux Data with Simulation Results

In the MS Windows version of ChemSep we introduced total reflux simulations and showed how to make comparisons of measured temperature and liquid composition profiles in Microsoft Excel. Such plots can now be more easily made inside ChemSep, as illustrated below. The distribution comes with example files (fri*.sep).



New: Load ChemSep Columns Residing in COCO Flowsheet Files

In Version 6.6 we allow direct loading of any ChemSep column from COCO flowsheet files! If multiple columns reside in the FSD files a list of column names is shown for the user to select. The columns are loaded in stand-alone mode i.e. they are saved as sep-files residing outside the flowsheet. This allows the user not only to inspect results but also to solve these columns - but then using ChemSep internal property routines.