

## **Using the visPROP for Excel Interface for Retrieval of Fluid Properties from Database and Property Correlation Formats**

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Easy access to a range of thermophysical properties, either from a database of measured or preferred property values or calculated from correlations to state properties and other physical properties, is often a barrier to effective use of such properties in equipment and design analyses. The visPROP Add-In for Excel is an intuitive utility for bringing fluid and material property values into the Excel calculation environment, or usable as an API module to custom program environments. This application has been used to simultaneously access company proprietary data and commercially available databases and calculation codes such as Cryodata's GASPAK and HEPAK fluid property packages. A range of unit-of-measure options and conversion factors are embedded in the visPROP application, along with several other useful utilities for complete thermodynamic analysis of fluid systems. Properties may be viewed through the Excel Forms environment, graphed for visual presentation, and used in rigorous iterative calculations using function calls to properties in the Excel spreadsheet environment. This presentation provides a Poster Paper discussion of using the visPROP application for process and equipment design problems, plus hands-on use of the application for symposium participants to experiment with the applicability of visPROP to their own unique design problems.