



## XPSIM eXtended Process SIMulation

A simple and complete industry simulator for modeling and optimization of plants in the petroleum, oil & gas and chemical industries.

# Process Simulation Services

XPSIM is a complete and high-fidelity steady-state process simulator for the solution of engineering design problems for the oil & gas industries and chemical industries

This software product is the results of over 25 years of knowledge and application in the field of steady state and dynamic process simulation of the author.

This large experience has been placed in this product created by a process and software engineer for process engineers.

### User Interface

XPSIM provides a seamless bridge between the historical key-word input language of process simulators and the graphic windows interface which enables the drawing of process flow diagrams with unit-operation symbols and connecting streams.

- Rigorous thermodynamic methods**  
 A large number of methods are provided for the evaluation of thermodynamic and transport properties for pure components and petroleum cuts or pseudo-components.
- Regression analysis**  
 The capability of regression of experimental data to provided interaction constants for the SRK, PR equation of state and of liquid activity models as NRTL, WILSON, etc. is included as a standard feature.
- PVT experimental analysis**
- Crude module simulation**  
 The simulation of crude oils assays is also provided as a basic function and is not required as an add-on module.
- Unit operations**  
 All the important unit operations are simulated: distillation columns, phase separators, control and safety valves, heat-exchangers, compressors and expanders, pumps, etc.
- Pipeline simulation**  
 This module provides a most reliable and complete function for the simulation of transfer line. Coupled with gathering and general network solutions it provides the tools for design, optimizations and de-bottlenecking of pipeline systems.
- Gathering and Networks**  
 XPSIM includes efficient algorithms for the solution of gathering and network systems. The process engineer can easily solve complex design options and optimizations of pipelines systems for either oil and gas productions.