

OLI Simulation Studio

Providing You



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for the Plant,

Laboratory,

Oilfield &

Environment



The heart of OLI Software is the OLI Engine. The new Stream Analyzer UI is provided by the Analyzer line of products, which results in a virtual desktop chemistry laboratory on your PC. Using an intuitive Windows[™] interface, it enables you to predict the complete speciation in each phase (aqueous, vapor, non-aqueous liquid, solid). Troublesome scale formation and unwanted side reactions are predicted. Stream thermodynamic and transport properties such as density, conductivity, viscosity, osmotic pressure, and redox potential are calculated. Calculating dew points and bubble points for complex mixtures, as well as predicting solution pH are easily accomplished. You can also specify a target pH value and adjust the chemistry of your stream accordingly. It is easy to simulate acid/base and chelant titrations using reagents that you select, and to perform predictive surveys by varying one or two parameters over a broad range of conditions. Stream Analyzer now handles mix and separate operations, and the performance of further calculations on the mixed stream.

Engine

is the foundation of every OLI product and technology. The Engine and databank have been built to serve industry needs worldwide, and our data service will do whatever it takes to meet your needs, too. The new mixed solvent electrolyte model will enable more simulation power than ever before.



Besides providing the OLI Engine through all of the major process simulators, OLI provides its own dedicated steady state aqueous flowsheet simulation that is easy to use, and includes process simulation technology that can be found in no other process simulator. OLI also offers a powerful dynamic simulation product that can access all OLI Engine models and data. Steady state models include models for a reactive separations tower, including, optionally, heat and mass transfer limitiations, neutralization, precipitation, co-precipitation, crystallization, absorber, stripper, solvent extraction, ion exchange, bioreactor/clarifier, membrane separation, surface complexation, and adsorption. All of these capabilities allow you to augment your conventional simulator results by examining specific unit operations, or flowsheet segments with more rigor and accuracy than is possible with conventional simulators.





The Corrosion Simulation Program (CSP) provides the world's only predictive rates of corrosion model. Via the Corrosion Analyzer UI, now you can produce real solution stability diagrams and theoretical polarization curves at realistic conditions to understand your corrosion problem better. You can then evaluate the rate of uniform corrosion for your process at a single point, or over varying conditions that you select.



is the tool which enables any higher level program to call and access the power of the OLI Engine. It is this software, which is utilized by all of the world's major process, flowsheet simulation programs, as well as other higher level programs.



provides the world's most rigorous and accurate oilfield scale prediction model. Now you can evaluate the scale potential in the reservoir, well, and surface facilities. Wizards guide you through the step-by-step process.



OLI specializes in the difficult problems that no one else can solve

For thirty five years, OLI has helped the world's largest chemical companies solve difficult process chemistry, corrosion, scale, water treatment, and environmental challenges. We are committed to technology advancement. We will never stand still when it comes to improving technology and service. OLI is distinguished by our focus on technology R&D. As a result, we offer you the:

- Best electrolyte models No one else has spent \$35M++ on this!
- Best databank
- Best service and support
- Best thermophysical properties and electrolyte process chemistry
- Best problem solving
- Best software tools
- Best corrosion and scale simulation

OLI Technology Breakthroughs — A history of service to industry, featuring:

- Only predictive aqueous model and databank valid at high ionic strength, temperature, and pressure
- Only mixed solvent electrolyte model that supports speciation (i.e., reaction chemistry and solid-liquid equilibrium as well as vapor-liquid equilibrium)
- Only high temperature/high concentration transport property models
- Only predictive rates of uniform corrosion model
- Equation of state for aqueous systems >300 °C
- Proprietary estimation methods applicable to Helgeson equation of state
- State-of-the-art thermodynamically-based adsorption and membrane process models
- Reactive separations tower model
- Rigorous biotreatment process models
- Only development of solution crystallization particle kinetics based on rigorous stable solid and supersaturation prediction