

OLI Systems adds more capability to the V9.6 platform with the release of V9.6.2

A combination of industry-leading data parameters, thermodynamic frameworks, and software innovations tackle complex water chemistry challenges

[Read about the V9.6 platform](#)

[OLI Systems, Inc.](#) has added more capability to the [V9.6 platform](#) with the release of V9.6.2. The V9.6 platform brought major capability to many clients. For upstream oil & gas, V9.6 brought a new MSE-SRK thermodynamic model, with unparalleled ability to handle systems with hydrocarbons and supercritical components at high pressure. For deep wells and extreme production environments, HPHT parameters for PbS, ZnS and CaSO₄ scales were developed. Also, V9.6 brought new corrosion-resistant alloys (CRAs) and new drilling completion fluids chemistry.

The V9.6 platform for [industrial water treatment](#) (including natural and contaminated water) and chemicals processing, the new arsenic and struvite chemistry models help to optimize water treatment and predict scaling during water management. The new reverse osmosis (RO) membrane simulation in our Flowsheet: ESP process simulator allows process engineers to simulate real process waters outside of manufacturer's specifications to enable process optimization. For [lithium and potash mining](#), the new lithium and potash chemistries provide a rigorous thermodynamic foundation for the optimization of lithium and potash production with [OLI Flowsheet: ESP](#) by predicting solid formation during the production process.

For V9.6.2, we have expanded the capabilities of the V9.6 platform in industrial water treatment. This release strengthens OLI's position as the most comprehensive provider of simulation software for industrial water treatment. OLI Flowsheet: ESP is already positioned as a unique software that takes into account three aspects of water treatment simulation: rigorous chemistry interactions; essential surface, kinetics and mass transfer phenomena; and specialized electrolyte blocks for flowsheet simulation.

With V9.6.2, OLI Flowsheet: ESP has just gotten more capable:

Easier to apply kinetics to your flowsheet

Tuning your process to your field results just got easier with the ability to use a kinetics conversion factor in conjunction with the Flowsheet: ESP controller. This simple-to-use percentage converted factor will allow you to see the effect of partial reactions on a flowsheet.

Apply surface reactions in a flowsheet

OLI has improved the surface complexation capability in the model for water treatment processes. Use this feature in conjunction with the Reactor Block and the Controller to determine how much of your component will be adsorbed. This technique has been already applied for working with the MgOx chemistry for silica removal in warm or hot lime softening. It

can also be extended to other pollutants, heavy metals such as Hg, Se, As, on a hydrous ferric oxide (HFO). Please ask us for a case template for this feature and a step-by-step guide that explains how this simulation technique works.

Step-wise execution for complex processes

For simple flowsheets that take a few minutes, it is easy to run the system to completion each time. For a more complicated process, this step-wise feature is a time saver!

V9.6.2 also brought more capability in autoclave simulation. OLI has pioneered autoclave simulation in the OLI Studio. This work continues to develop with making the simulation consistent for all OLI thermodynamic frameworks, and also by showing partial pressure and fugacity properties. In addition, autoclave simulation has gotten much easier to visualize and setup through OLI Flowsheet: ESP. In 2019, look for the full roll-out of our Autoclave Dashboard. For V9.6.2, you can get a sneak preview of how easy autoclave simulation has become with the addition of the isochloric mixer. OLI's target audience for the Autoclave Dashboard is moving from the central research engineer to the lab technician.

Isochoric mixer in a flowsheet

Specifying a mixer volume of 1 liter, for example, is a natural way to formulate many simulation cases. This is now possible with the new isochloric mixer in Flowsheet: ESP.

Finally, V9.6.2 continues our mission to make the OLI product line more accessible and easier to use for beginners and occasional users, for technicians and field engineers as well as for central research specialists. These usability improvements for all clients are a collection of improvements and some fixes in the OLI studio and in Flowsheet: ESP that you will benefit both beginners and advanced users. Some of these include (listed by product):

Studio: ScaleChem

- ZnS and PbS are now standard solids

Studio: Stream Analyzer

- Greater range and flexibility in survey calculations
- Easier to read reports

Flowsheet: ESP

- Usability improvements during calculations, case building, reporting, and results analyses
- Advancements when navigating the interface, selecting units, streams, callouts, and variables

The new V9.6.2 release is available 30 November 2018. Please take a look at some [examples for OLI V9.6.2 for OLI Flowsheet: ESP](#) on the OLI website.

Also, the Sales, Client Success and Support team has prepared some short videos on the [OLI You Tube channel, "Release 9.6.2"](#)



V9.6.2 Release

If you are an OLI client, we encourage you to have your IT departments update your software to V9.6.2. If you do not yet have access to one of the OLI software components and you would like to try it, please [let our Sales, Client Success and Support team know](#).

About OLI Systems, Inc.

OLI Systems, Inc. is a global leader in the modeling and simulation of electrolyte chemistry applications. This capability accelerates process design optimization, reliability, and productivity in capital intensive industries including oil & gas, metals & mining, nuclear energy, chemicals, water management, utilities, and defense. With core competencies in electrolyte thermodynamics, process simulation and electrochemical corrosion and scaling simulation, OLI has developed both the framework and the parameters for the framework that make it possible to accurately predict the behavior of virtually any combination of chemicals in electrolyte solutions. OLI's highly unique and rigorous solutions includes a comprehensive chemistry data bank and parameters, thermodynamic frameworks, software portfolio, services capabilities, and rich applications expertise. These solutions enable over 500 commercial organizations around the world to solve their most complex water chemistry challenges. OLI's solutions are also used by students and researchers in many academic and government organizations. OLI Systems, Inc. is headquartered in Cedar Knolls, NJ USA

THINK SIMULATION! Getting the chemistry right.