



## Accelerate Upstream Oil and Gas process modeling insights with the new OLI Platform V10

31 <i>New Enhanced Capabilities</i>	4 <i>Solution Areas</i>	3 <i>Upstream Application Categories</i>
<ul style="list-style-type: none"> <li>• 8 new chemistries</li> <li>• 9 new software features</li> <li>• 14 software quality updates</li> </ul>	<ul style="list-style-type: none"> <li>• High Pressure, High Temperature (HPHT)</li> <li>• Scaling Prediction</li> <li>• Corrosion Prediction</li> <li>• Water Treatment</li> </ul>	<ul style="list-style-type: none"> <li>• Drilling &amp; Completion</li> <li>• SAG-D Steam Injection</li> <li>• Oil &amp; Gas Production</li> <li>• Gas Processing</li> <li>• Water Treatment</li> </ul>

## Boost Operational Efficiency, Reliability, and Compliance

Increase operational efficiency with better asset and process design

- ✓ More accurate scale prediction in HPHT environments
- ✓ Better scaling and corrosion prediction for iron carbonate chemistries
- ✓ Accurate corrosion prediction for a new set of corrosion-resistant alloys (CRAs)
- ✓ Enhanced corrosion model predictions for existing alloys in the OLI database

Mitigate risk and enhance compliance with better operations insights





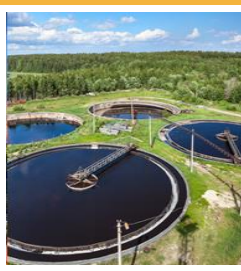
- ✓ Better scaling and corrosion prediction for iron carbonate chemistries
- ✓ More comprehensive autoclave simulation to mitigate corrosion
- ✓ More effective elimination of selenium and other toxic contaminants
- ✓ More effective sulphur recovery processes

Accelerate productivity of process modeling users with software enhancements

- ✓ Faster, simpler process simulation with ionic input capability and engine performance updates
- ✓ Greater flexibility in creating simulation cases with virtual streams
- ✓ Automation of hardness, TDS, and pH calculation at a reference condition



## Highlights of OLI Platform V10 applications in Upstream Oil & Gas

Drilling & Completion	SAG-D Steam Injection	Production / Flow Assurance	Gas Processing	Water Treatment
				
Ion Exchange HPHT Scaling CRA behavior	Steam quality Silicate scaling Feed water cleanup	Mineral scaling Corrosion Dew Point, pH	Gas sweetening Sulphur recovery Corrosion	Disposal water treatment Water re-use

## New chemistries and software features in OLI Platform V10

<i>New chemistries and data parameters</i>	<i>New and enhanced software features</i>
<ul style="list-style-type: none"> <li>Barium sulphate and calcium carbonate in HPHT</li> <li>Iron carbonate complexation</li> <li>New CRAs: S13CR, S15Cr, S17Cr, and 2550</li> <li>Enhanced Alloy Chemistry: 625, 825, 22, 276, and 2205</li> <li>Humic substances – humic, fulvic, tannic and gallic acids</li> <li>Selenium</li> <li>Sulphur dioxide, ammonia</li> </ul>	<p>OLI Flowsheet: ESP</p> <ul style="list-style-type: none"> <li>Ionic input of species</li> <li>Faster reverse osmosis (RO) unit operation calculations</li> <li>Murphree component efficiencies in multistage column</li> <li>Faster calculations: larger models, engine updates</li> <li>Hardness, total dissolved solids (TDS), and pH calculation at 25°C, 1 atm</li> <li>Virtual streams</li> <li>Easier global unit set up configuration on the first run</li> </ul> <hr/> <p>OLI Studio</p> <ul style="list-style-type: none"> <li>Hardness calculation reported as liquid property</li> <li>Enable TDS as a rigorous calculation</li> <li>Updates to corrosion in high CO2 concentrations</li> </ul>

## Key Reasons to choose the OLI Platform for water chemistry simulations

- Comprehensive solution for simulating HPHT environments
- Corrosion prediction for a broad range of materials and conditions
- Accurate mineral scaling prediction, including HPHT conditions
- Accurate, sustainable industrial water treatment insights
- Most versatile and flexible simulation software platform
- Proven capabilities across 500+ global deployments
- Cloud and Digital Transformation Roadmap

Learn more about OLI Platform V10

