



## Accelerate process modeling insights with the new OLI Platform V10

34 <i>New Enhanced Capabilities</i>	5 <i>Solution Areas</i>	5 <i>Industry Segments</i>
<ul style="list-style-type: none"> <li>• 10 new chemistries</li> <li>• 10 new software features</li> <li>• 14 software quality updates</li> </ul>	<ul style="list-style-type: none"> <li>• Scale Prediction</li> <li>• Corrosion Prediction</li> <li>• Water Treatment</li> <li>• Lithium Production</li> <li>• REE Extraction</li> </ul>	<ul style="list-style-type: none"> <li>• Upstream Oil &amp; Gas</li> <li>• Downstream Oil &amp; Gas</li> <li>• Metals &amp; Mining</li> <li>• Power Generation</li> <li>• Chemicals</li> </ul>

## Boost Operational Efficiency, Reliability, and Compliance

Increase operational efficiency with better asset and process design

- ✓ More accurate scale prediction in HPHT environments
- ✓ More efficient extraction and recycling of Lithium and Rare Earth Elements
- ✓ Accurate corrosion prediction for a new set of Corrosion Resistant Alloys
- ✓ More efficient nuclear fuel production and waste processing

Mitigate risk and enhance compliance with better operations insights






- ✓ Better scale prediction for calcite, siderite, and barite
- ✓ More comprehensive autoclave simulation to corrosion testing
- ✓ More effective elimination of selenium and other toxic contaminants
- ✓ More effective desulphurization and sour water stripping 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
- ✓ Automatically calculate total hardness, total dissolved solids, and reference pH



## Highlights of OLI Platform V10 innovations across industries

Upstream Oil & Gas	Downstream Oil & Gas	Water Treatment	Lithium Extraction	Rare Earth Elements Mining
				
HPHT Scaling CRA behavior Iron carbonate	CRA Corrosion Desulphurization Sour water	Selenium Humic substances RO enhancements	Lithium Cobalt Battery recycling	Rare Earth fluorides in AQ environments

## 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>BaSO<sub>4</sub> and CaCO<sub>3</sub> in HPHT</li> <li>Fe-CO<sub>3</sub> complexation</li> <li>New CRAs: S13CR, S15Cr, S17Cr, and 2550</li> <li>Enhanced Alloy: 625,825,22,276, and 2205</li> <li>Lithium and cobalt</li> <li>Rare earth fluorides</li> <li>Humic substances, selenium</li> <li>Uranium fluoride and iron</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 convergence of RO calculations</li> <li>Murphree component efficiencies in multistage column</li> <li>Faster calculations: larger models, engine updates</li> <li>Hardness, 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> <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 CO<sub>2</sub> concentrations</li> </ul>

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

- Extensive chemistry innovations for accurate simulations
- Corrosion predication 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

