OpenLAB Electronic Lab Notebook (ELN) for Analytical Chemistry

Data Sheet

In an increasingly competitive environment, corporations must capitalize on scientific knowledge and discoveries faster and at reduced cost. Analytical chemistry labs constantly strive to reduce the time it takes to capture, analyze, and report analysis results. Agilent OpenLAB ELN is an easy-to-use, flexible electronic laboratory notebook that saves analysts’ valuable time, shortens the path to results, and expedites better-informed decision-making.

- Search, share, and reuse protocols and methods; clone an entire experiment and learn from others
- Queue and track requests for analysis, prompt for approvals, and provide immediate access to status and results
- Integrate workflows with external systems including Scientific Data Management Systems
- Design templates, tables, and data-entry forms quickly with Dynamic Forms
- Insert files, images, chromatograms, and spectra directly; include searchable annotations
- Import result data from chromatography data systems – such as Agilent ChemStation and Waters Empower — using Smart Import
- Collaborate on a single experiment using multiple techniques per sample while maintaining audit trails for each researcher
- Generate detailed analysis reports across samples or techniques

Figure 1. The Analytical Request Workflow in OpenLAB ELN lets you manage electronic requests, create sample lists, and queue and prioritize work for analysts – without leaving your desk.
Streamline the analytical process from sample submission to final answers, with the Analytical Request Workflow:

- Eliminate the need to go from lab to lab to submit analysis requests, prioritize samples, track status, or gather results for a final report
- Select samples across requests into a single experiment and link methods, data, and results for any sample, to eliminate transcription errors and minimize the time to check and collate results
- Reduce the time and effort to route documents for approval and report results

Reduce repetitive tasks using Dynamic Forms and Experimental Templates, so analysts can run more samples per day:

- Design standard templates so you can quickly and consistently record analytical methods and procedures
- Minimize the amount of time to enter routine data such as equipment, volumes, and reagents, by using pick lists, tables, and check boxes
- Use conditional formatting, calculations, and scripting to enhance data consistency and prompt users for required information

Record and access results faster with Smart Import:

- Import data directly from instrument data systems, including ChemStation, Agilent MassHunter, Empower, and others that store data in an XML format
- Access and import metadata from any file type stored within OpenLAB ECM
- Transfer results directly into predefined Microsoft® Excel templates for additional calculations, such as trend analysis or purity checks

Automatically upload result files directly from instruments, configure print-to-functionality from any application, and archive experiments into a secure data repository by adding Agilent OpenLAB Enterprise Content Manager (ECM) to your analytical laboratory data solution. OpenLAB ECM seamlessly integrates with OpenLAB ELN to provide a secure, robust archive for all experimental details and results in your lab.

Figure 2. Dynamic Forms accelerate record-keeping and ensure that the correct information is consistently captured, as shown in this protocol for impurity detection by LC/MS.

Figure 3. The Analytical profile enables researchers to spawn multiple analysis techniques on one or more samples in a single experiment, track sample preparation details, method conditions and results. Reports can be quickly generated across samples or multiple techniques.

Figure 4. Configure the experiment desktop to look the way you want with Experiment Templates. Share and re-use across an organization simplifying data capture for specific experimental processes. Create new chapters and tabs using your terminology to reflect your experimental procedures.

To learn more about OpenLAB ELN, visit us at www.agilent.com/chem/eln