

BUSINESS CASE STUDY

PDR-Separations LLC

DALP, AutoMDS, AutoPREP
Real-Time Spectral Deconvolution

All Liquid Modes
and Scales

A fast-response purification lab supporting medicinal chemistry inside a large pharmaceutical company

PROBLEM

The purification lab was struggling to process material quickly enough, staff was overwhelmed, and upper management wanted the lab to “do more with less”

GOALS/SOLUTIONS

The company's lab manager needed to increase throughput, reduce lab size, and reduce staff.

At first these collective goals seemed unachievable. After discussions with PDR-Separations the company decided to have PDR-Separations reconfigure the company's Agilent HPLC systems to operate with PDR-Separations' automation software and hardware.

The reconfigured Agilent analytical method development systems now run automated screening sequences written by PDR-Separations using PDR-Separations' AutoMDS software with Gradient Mixers and Column Selectors.

The reconfigured Agilent semi-prep purification systems now run automated purification methods using PDR-Separations' AutoPREP software with Injector/Collector modules.

BENEFITS/ACHIEVEMENTS

Results provided by the reconfigured HPLC systems were impressive.

Samples were processed faster and more deterministically. Because PDR-Separations' lab automation software was easy to use, did not require much attention, and was common to all systems staff had more time for other tasks

By operating the automated systems 24/7 the company was able to eliminate some systems resulting in reduced lab space. Overall results show the Lab now processes 5 times more samples in 70% of the space with 80% of the previous staff.

The no longer overloaded staff are able to do more research, attend meetings and write reports.

The combination of a new operating procedure, better automation software, and enabling automation hardware required a few months to adapt but everyone is much happier now, including upper management.

The cumulative benefit of improved procedures with better automation software and automation hardware resulted in a much better ROI than expected.