

## Automation Software (AutoPDR™)

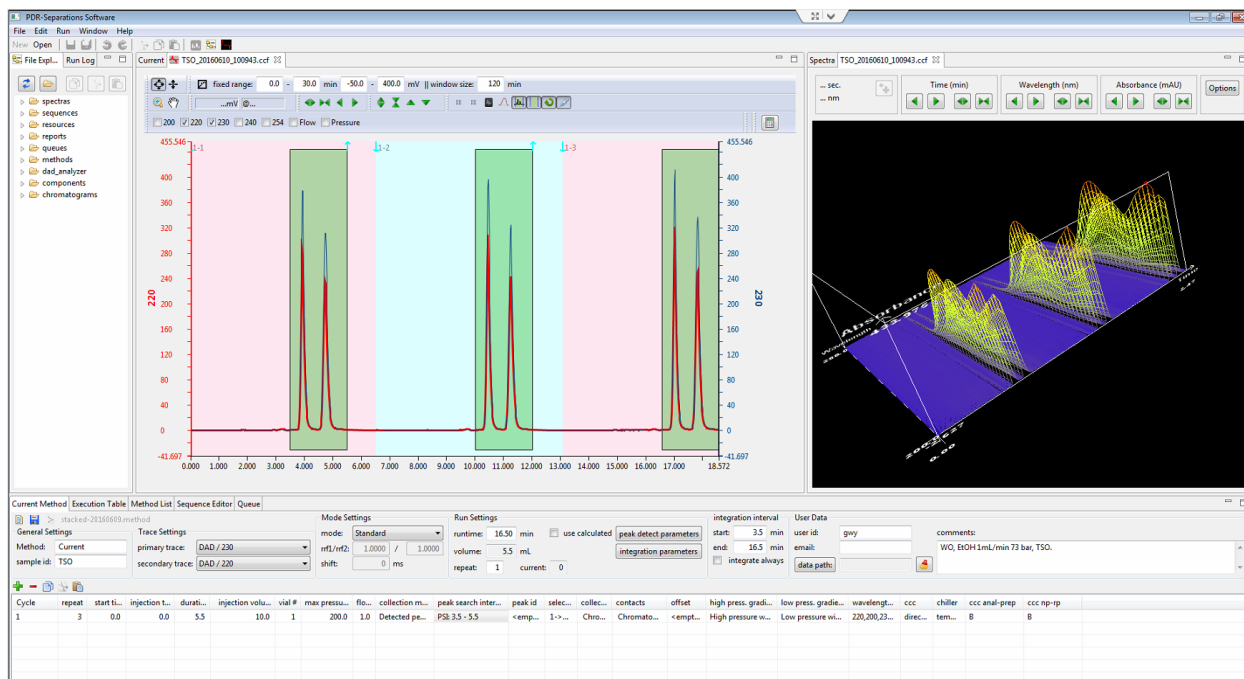
Generic User Interface → Hardware Independent Software

Industry Standard Features plus many Unique Features / Flexibilities

On-Demand Remote Support

### Introduction

Starting in the year 2000 PDR operated a rapid outsource purification service, our ALP (Advanced Laser Polarimeter) gave us a competitive edge in chiral separations. We were disappointed by available software, so developed our own 100% in-house. We did not copy other providers, but developed our software from a laboratory productivity viewpoint that minimized labor – useful automation. We separated methods from hardware so we could run mixed manufacturer systems. Our generic user interface is based on chromatographic parameters, not manufacturer of hardware. Over time we expanded applications and features beyond HPLC and SFC to include UPLC, CCC/CPC, SMB and Process. To keep up with technology, change structure and add new applications we occasionally completely rewrite our software. The newest release of AutoPDR™ is written in Java and includes unprecedented control of events and advanced mathematical features. Java programs are ubiquitous on PCs, tablets and smart phones. Java is the most forward-looking programming language available today.



## Features

- AutoPDR™ delivers 24/7 unattended operation and can be configured for many application including HPLC, UPLC, SFC, CCC, CPC, SMB and Process. More applications can be added as required.
- AutoPDR™ controls systems configured with hardware from mixed manufacturers. We can add control for more hardware as required.
- Generic user interface is not hardware dependent so applications can run the same on systems configured with appropriate hardware from different manufacturers.
- Having a generic user interface on different types of systems in the same lab improves productivity and reduces training requirements.
- 24/7 unattended operation and unprecedented control of events result in higher throughput.
- Full calculation capability (RT, area, plate count, concentration, etc.).
- Easily build, edit and run large sequences or complex methods using multiple cycles for automated operation.
- Queue allows flexible sequencing of multiple sequences and methods.
- Data Processing Tool (DPT) shows multiple chromatograms in thumbnail view and can filter chromatograms based on values like number of peaks, relative area of peaks, retention time, minimum area, etc.

## Flexibilities

- Can be configured for any many applications. Currently used in HPLC, UPLC, SFC, CCC, CPC, SMB and Process.
- Control of additional hardware added at customer request.
- Custom features added at customer request.
- Exclusive PDR Eluent Mixer delivers random gradients from 10 or 20 bottles.
- Control up to 4 PDR Column Selectors (24 positions each) for unprecedented column flexibility.
- User Interface is customizable in many ways. Referring to first page image, many users close the 3D display on right for routine applications.

## Remote Support (SoIP)

- We offer remote system and application support via internet called SoIP (Service over Internet Protocol).
- SoIP delivers near-instant support for most applications and systems, significantly improving productivity and reducing expenses.
- SoIP is included for the first 12 months and available for a modest annual fee after that. There is no recurring license fee.
- Customers can also use remote connectivity to monitor and control operations from a laptop/tablet/smart phone, important for 24/7 operation when no one is in the lab. We currently use and recommend Team Viewer because it is secure and used by corporate IT professionals worldwide.
- Remote support and customer remote connectivity together with an appropriately programmed and configured system can improve productivity, reduce expenses and relieve many staff restrictions.