AuPRO™ 7 Software

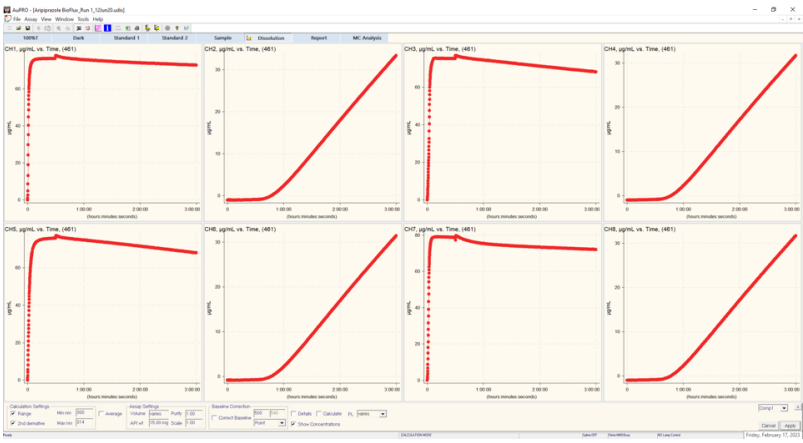
AuPRO™ is Pion's UV absorption data collection and refinement software for the Rainbow dynamic dissolution monitor that offers a broad range of advanced tools for today's R&D scientists to analyze dissolution, solubility, and flux data or measure UV-absorption-based concentration in any assay setup.

Features:

- Collects data from up to 8 individual fiber optic channels
- Each channel can measure different samples in different media
- Real-time concentration monitoring in each channel
- Diverse capabilities to deal with highly turbid solutions
- Multiple mathematical approaches to resolve the contribution of 2+ absorbing components
- Easy to use software platform
- Automated data processing capabilities

Standard features include:

- Multiple baseline correction options
- Analysis of up to 2 absorbing components in the same channel using the ZIM method
- Multiple export options (Excel, HTML, image)
- Control of stirrer devices: MiniBath8 (MB8) and mini Dissolution Tester (miniDT)



Advanced features include:

- Analysis of up to 4 absorbing components in the same solution using the zero intercept method or multi regression analysis
- The automated data processing algorithm checks the quality of the standard and sample spectra, excludes the unreliable data, sets the spectrum processing parameters and generates a detailed report of the issues found. (Works for single absorbing cases only.)
- Nanoparticle standards export: nanoparticles not just scatter the light, but in some cases, they absorb it as well. When solubility assays are performed with nanoparticle samples, the ZIM method can be used to characterize the solubility of the API in the presence of nanoparticles. With nanoparticle standards export feature, a set of standards can be created that will represent the nanoparticles absorption profile and can be utilized in various assays to quantify the dissolved API and the nanoparticles continuously during the assay.
- Polynomial standard curve fitting feature allows the user to monitor the concentrations outside of the linearity range of Beer's Law when signal saturation limit is reached. This can extend the quantification range primarily in the high concentration's region of highly soluble small or large MW compounds.
- Real time data export provides a file with real time concentration data that can be read and utilized by other software and equipment as feedback loop for in-process control or flow chemistry applications.

	Standard	Advanced
Software		
Windows 10 & 11 compatible	✔	✔
Click and drag zoom on all graphs	✔	✔
Graph export as data or image	✔	✔
Excel export	✔	✔
HTML reporting	✔	✔
1nm or 2nm wavestep	✔	✔
Different assay media per channel	✔	✔
Blue standards (reuse standards in multiple assays)	✔	✔
Advanced baseline correction: line, average, scatter modeling	✔	✔
2nd derivative spectra analysis	✔	✔
2nd set of standards	✔	✔
2 components analysis with Zero Intercept Method (ZIM)	✔	✔
Blank channel	✔	✔
Reference channel	✔	✔
Coordinates & spectra comparison	✔	✔
Lamp saving option	✔	✔
MB8 communication	✔	✔
miniDT Communication	✔	✔
Automated data processing	✘	✔
Real time data export	✘	✔
3rd and 4th set of standards	✘	✔
Nanoparticles Standards	✘	✔
Polynomial standard curve fit	✘	✔
2-4 components analysis with multicomponent analysis	✘	✔
Flux Calculations	✘	✔
Dissolution curve analysis	✘	✔
Instrinsic solubility calculation	✘	✔
Exporting scatter parameters for particle size estimation (20-400 nm range)	✘	✔

Pion

Pion stands behind the science

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