

Instrument Control Software

From Manual Runs to 20X-Faster Automation

Yahara Software built the control software and method-development app behind Tosoh Bioscience's OctaveBio instrument.

Our Client

Tosoh Bioscience makes instruments for biopharmaceutical purification. Its OctaveBio system runs chromatography across eight columns in parallel instead of one, aiming for up to a 20-fold productivity gain over traditional methods.

The Problem We Solved

A faster instrument only helps if scientists can run it with confidence. OctaveBio needed control software that could set up and execute experiments with minimal hand-holding, keep operators safe with real-time alerts, and hold up to the rigorous testing required before it could release as a regulated commercial product.

The Value We Delivered

Yahara built BIOController to automate experiment setup, sequencing, and execution, with live status views, real-time data trending, and safety alerts built in, and updated the ProComposer app for method development alongside it. Paired with the test scripts and qualification plans Tosoh needed to validate the system, the result was a polished commercial product — prototyped and pilot-tested directly with scientists — that was cited as a key asset in Tosoh's acquisition of Semba, and one Yahara still supports on ongoing feature roadmaps.

What Was Accomplished

- **Instrument Control Software:** Automating setup, sequencing, and execution for lab process hardware
- **Compliance-Ready Infrastructure:** Test scripts, cases, and qualification plans built in from day one
- **Human-Centered Design + Agile:** Discovery-through-delivery phases that keep scientists in the loop
- **Real-Time Monitoring & Alerts:** Live status, data trending, and safety indicators for operations
- **Long-Term Product Support:** Ongoing feature and hardware roadmaps whenever it's needed