A global pharmaceutical company was performing physical measurement experiments using a variety of instruments, manually operating the machines and recording resulting data by hand. Because the process was manual, they were at risk for measurement and data entry errors. In addition, the inefficient methods required hours of a scientist’s time and effort.

**The Challenge**

PVI Systems designed a series of machines to automate the physical aspects of pharmaceutical lab testing. Manual measurement devices were replaced with computer-controlled instruments and robotic systems. Data could then be captured electronically and stored in a global database with minimal interaction from scientists and laboratory technicians. This eliminated the measurement and data entry risks of the manual processes.

A unified software application, developed using the LabVIEW development environment, provides a common look and feel across the different experiments. This common interface eases lab operation, requiring less training. The software includes Calibration and User Management functions to provide a comprehensive solution. A global database was designed by PVI so that scientists around the world could perform experiments, and all locations could share in the viewing and analysis of the data.

**Features**

- Custom-designed robotic and computer-controlled lab instrumentation
- Common, simplified user interface across instrumentation
- Used in company’s drug discovery, materials, and research labs
- Global corporate database access
- Built-in user management
- Report generation capabilities
- Developed using LabVIEW and National Instruments hardware solutions

**Deployment**

The automated machines are in use at the company’s major research facilities. The database solution is an Oracle database server located at a remote server location. While the machines themselves are located at a handful of lab facilities, the software has been deployed worldwide to allow remote scientists access to research findings.

For more information, contact us at info@pvisys.com.