



Unity Scientific

117 Old State Road

Brookfield, CT 06804

PHONE: (203) 740-2999

FAX: (203) 740-2955

[unityscientific.com](http://unityscientific.com)

*For Immediate Release*

*Tom Bloomer 203-796-0993*

## **Unity Scientific Announces New Patent on NIR Calibration and Prediction Software to Improve Accuracy**

Brookfield, CT, February 2012 – Unity Scientific, a global leading supplier of Near Infrared (NIR) equipment announces that it has been granted a new patent. The patent is for “Method and system for increasing optical instrument calibration and prediction accuracy within and across different optical instrument platforms”. This is in relation to the UniStar suite of products including UCal and UScan. The new patent number is US 8,108,170 B1 and the inventors are the late Dr. John S Shenk, John W Shenk, Bill Brown and Dr. Paolo Berzaghi. This is a very important patent and validates the work of Dr. Shenk and his team to develop a tool that can correct for optical differences within an instrument platform or between different platforms and vendors to improve the calibration and prediction accuracy.

The patent focuses on a method and system for increasing the optical instrument calibration and prediction accuracy within and across different optical instrument platforms. The process is comprised of two main sub-methods or routines. The first routine can include one for correcting differences among optical instruments of different model types regardless of the manufacturer and also correcting differences that may exist within instruments of the same model and manufacturer. The second routine or sub-method includes one for analyzing new samples of a product over time and maintaining prediction accuracy as compared to a reference method over time. The design provides techniques on how an NIR product database can be cleaned, condensed, and expanded automatically as it is used by one or more different optical instruments.

“This patent and the outstanding work performed by Dr. Shenk and his team express the dedication of our development team to continue the advancement of NIR technology”, explain Doug Evans, President of Unity Scientific. “This software design will allow for a calibration to be used across different instrument platforms from various manufacturers and achieve accurate results from each unit. It also allows a customer to easily manage their calibration automatically with the software performing routines to condense and clean the database to make it more effective. This is truly a breakthrough in the NIR field and Unity is proud to be leading the way by developing software that can benefit any instrument platform”, continues Evans.

For more information contact Tom Bloomer at 203-706-0993 or by email at [tbloomer@unityscientific.com](mailto:tbloomer@unityscientific.com)

*Unity Scientific is a global leading supplier of near infrared instrumentation and automated wet chemistry analyzers. Over 2,500 NIR spectrometers have been installed worldwide along with over 6,000 wet chemistry systems. The corporate headquarter and new global technical center is located in Brookfield, CT with European headquarters being located in Rome and Paris. Unity’s Asia Pacific office is located in Sydney, Australia with sales offices located throughout the world.*

□ **UNITY**

□ **WESTCO**

□ **ALLIANCE**

□ **AMS**

□ **YSEBAERT**

□ **SYSTEA**