



Unity Scientific, LLC, 10240 Old Columbia Rd.

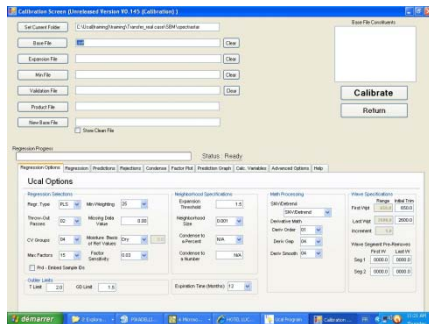
Columbia, MD 21046

PHONE: (540) 338 - 8991

FAX: (540) 338 -8992

unityscientific.com

## New UniStar chemometrics software optimises NIR calibration development and maintenance costs



**Columbia, MD, March 22, 2010 – Unity Scientific, LLC announces the launch of its new UniStar software, an exciting addition to the SpectraStar range of near infrared (NIR) analysers. UniStar, specially designed for the development of NIR spectrophotometer calibrations in the food and agricultural sector, can be used across many different NIR vendor platforms. It includes applications which are unique for this type of equipment, along with powerful tools which can be used to simplify calibration processes, transfer spectral databases**

**reliably from one device to another, and optimise the maintenance costs of large spectral databases.**

Joseph Platano, CEO comments, “Traditional Chemometric packages use mathematical and statistical tools to extract information from chemical data. UniStar is the next generation of calibration software that can be used to optimise procedures and obtain a greater level of control, and to increase the quality of manufactured products. Our intent was to create a unique package that can be used across different NIR vendor platforms. This allows customers who use multiple brand instruments the ability and benefit from using one package.” Platano adds, “UniStar was developed in partnership with the renowned Dr John S. Shenk, who is a prominent pioneer in the NIR software world.”

### A NEW APPROACH

Previous applications have always required samples to be selected and analysed using a predefined calibration, regardless of the instrumental platform used. With UniStar, it is now possible to extend PLS calibration algorithms to each constituent element. This allows the user to select samples with greater precision, indicating each chemical constituent to be analysed. By using the full scope of PLS-1, operators can maintain, update and extend their usual calibrations for these samples, saving at least 50% of the reference analyses.

### NEW CONDENSE ALGORITHM

The patent pending UniStar software also incorporates a "CONDENSE" algorithm, which allows users to take an existing database and merge redundant samples, then establish averages. The aim is to create a database which is reduced and condensed but remains in line with the initial database. The resulting calibration is more concise while being identical to and often better than the old calibration. This module makes it easier to update calibrations of new samples, while reducing the costs involved in transferring them to different devices.

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