



MARCH 4, 2007

NEW EQUIPMENT INSTALLATION

Colleagues:

We are pleased to announce that two new pieces of equipment have been installed in the Quality Optimization laboratory in the last week.

The second is a highly advanced gas-chromatograph (Agilent 6890) with an Agilent 5973B Mass selective detector and a secondary FID detector. A gas chromatograph is designed to separate volatile compounds (such as aromas).

This device has a very advanced Gerstel package on it...it is remarkable, and will do many things, such as headspace (sampling the air above a sample), thermal desorption (from a substrate dipped into a sample), solid phase microextraction (tricky, but also a way to analyze volatiles without messy solvents), and even a gc-olfactometry port which allows YOU to smell each individual component as it emerges and is analyzed in the mass selective detector.

In short, it will be a workhorse, and will even allow 2-dimensional separations in that the material from one column can be frozen and sent to another for analysis. This allows for separations on a very complex scale, and the determination of materials at low levels.

We are very proud of it, and you should be able to use it to determine the evolution of aromatic characters in your products, and determine levels of markers for microbiological reaction products.

We are currently pursuing a couple of candidates to run the instrument, in and above Marta, our new WISELAB team member who will be driving the truck.



Did you ever see such a pile of putty-colored money in your life? Note the little glass funnel at the lower right...this is where you stick your nose to smell each individual aroma as it emerges from your column.

The little red box at upper left (above) is where the samples are prepared for analysis; the two red boxes at the front of the instrument are external columns, designed for rapid heating and separation. I'm not totally happy with this arrangement, as I think speed is not the end all and be all of human existence, and the separations are a little sub-par as of yet.



We're working hard and we'll get it figured out....