Rodney Melgard Thermo Nutech (510)235-2633

## Abstract for Bioassay Conference

## THE DIFFICULTIES IN DEALING WITH POSITIVE BLANKS

As long as blanks are consistent enough and positive enough to be determinable there are several ways to deal with correcting data. Great difficulties arise, however, in the case of bioassay blanks where the sensitivity requirements are such that a few counts, more or less, of blank or background in a day of counting are enough to make it impossible to determine the true net concentration of the sample activity. Lacking this information a true determination of the committed dose may be impossible or just a guess. I suspect that in most cases, the user of the data, being far away from the laboratory, may not be aware that the data base may be skewed by real or imaginary blanks whose origin is not properly understood and therefore may be improperly treated mathematically and statistically.

This paper will present some considerations of blanks which apply specifically to "extended state of the art" analysis. In these situations normal statistical evaluations fail and other means to gain confidence in data must be derived.