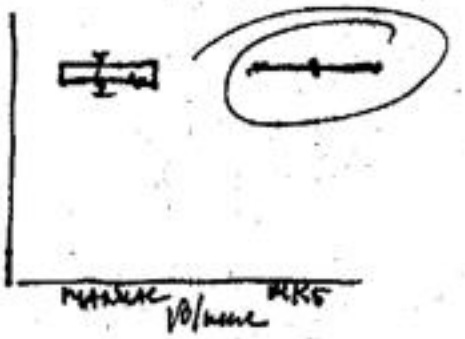
$n = 12 - \frac{16}{\text{pair}}$



49TH TOBACCO CHEMISTS' RESEARCH CONFERENCE
September 24-27, 1995
Lexington, Kentucky

I. Precision Hsmtr.

A) ^3H based
B) Colorimetric
C) Gravimetric

II. Prep'n. for Gravimetric Analysis

A) Compared syringe (gastight) vs micro-pipettor for accuracy & precision of delivery volumes (100µl, 500µl) of 1ST Buffer.
   1) Micro-pipettor was better based on actual delivery versus theoretical mass delivery.

B) Compared various volumes (100, 500, 800, 1000µl)
   1) Initial delivery assessment – Work 5 vs. pipettor – gravimetric data. → result: there was a signif. difference in volume delivery (gravimetric data.)
   ~~(a) Calibrated Hsmtr. Schedule~~
   (a) Probes cleaned & repeated process. (3/15/96)
   2) Determined that volume delivered was different between pipettor & HKS.
      (a) Regressed (Figures) mass vs volume for manual & HKS.
      (b) Adjusted HKS settings
   3) Series of gravimetric comparisons of pipettor vs. Work 5
      a) 100, 500, 800, & 1000µl – Manual vs. HKS – signif. different
      b) Precision was very good for all probes & as total 2CV. (Figures)
      (c) Mass to volume & mass (pipettor) vs mass (HKS) regressions (Figures)

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