What we need to do:

We need to measure the probability of the null Hypothesis. P

  The P value; is the probability that the true means of two probability distributions are the same.  For us, the first probability distribution might be viscosity, and the second distribution might be drag reduction.  However, of course the mean value of the viscosity can't equal the mean value of the drag reduction.   Perhaps we need to normalize the viscosity values and drag reduction values first, and then calculate the P value.  I will look for a paper that tells us the best approach