Answer on Question #46723-Physics-Other

In an experiment to determine the relationship between the current I through a piece of tungsten wire and the potential difference V across it, the theoretical relationship used was I=kVn, where k and n are constants which may be obtained from a straight line graph of the form y = mx + c, the symbols having their usual meaning. The corresponding linear equation for this experiment is ----------

I = nV + k

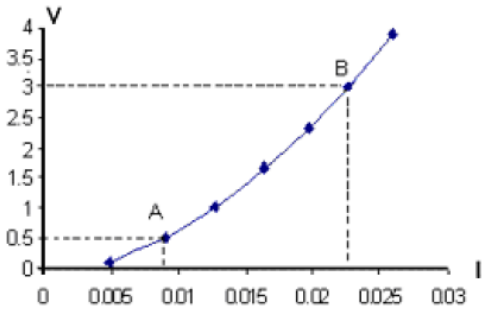
4I=nV^2+k

I=expV^n+k

logI = nlogV + logk

Answer

The corresponding linear equation for this experiment is $\log I = n \log V + \log k$.



As we can see from this graph other variants are not applicable.