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Direct Determination of Thomson Coefficients in Single Crystal Zinc Rods

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apparently catch up with them in this respect by the time they get started in college.

It is interesting to note that the correlation is not dependent on the size of the high school since we regrouped the students according to the size of high school attended and find that the coefficient, although low, is practically the same for each group. For students coming from towns of 4000 or more inhabitants the coefficient is 0.37, while for the rest it is 0.365. This leads us to believe that, in so far as grading is concerned, the small and large schools rank the same.

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EXPERIMENTAL TEST OF MAXWELL'S DISTRIBUTION LAW

J. A. ELDRIDGE

While objections have been raised to all the proof of Maxwell's distribution law there is probably little question it represents approximately the statistical distribution of velocities among the molecules of a gas. It is remarkable, however, that a direct experimental verification had never been made until Stern and Gerlach showed that the law was substantially followed when silver atoms were evaporated from a silver wire. A somewhat closer verification is being attempted by a similar method using as the gas cadmium vapor at low pressure. There are several applications of such a "velocity filter" to problems of kinetic theory.

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DIRECT DETERMINATION OF THOMSON COEFFICIENTS IN SINGLE CRYSTAL ZINC RODS

L. A. WARE

The Thomson coefficients for single crystal zinc as a function of the orientation of the principal crystal axis are being directly determined by Nettleton's method. For a rod with an orientation angle of approximately 45° the coefficient shows a rise with increasing temperature over the range $50-250^\circ$ C.

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