

1938

## Elasticity of Lead Crystals

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The survey was made with 185 students in 1936 and 140 students in 1938. The results for these two groups was almost identical.

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### SEVERAL SIMPLE LECTURE EXPERIMENTS

JOHN A. ELDRIDGE

A number of simple lecture experiments were demonstrated. These dealt mainly with inexpensive apparatus and had to do in the main with transformer circuits when the secondary was first open and then closed.

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### ELASTICITY OF LEAD CRYSTALS

ANDREW F. DEMING

Baker (University of Illinois) has found that for "resolved shear stress" above 100 lb./sq. in. lead crystals exhibit "creep" and are inelastic. By using the bending beam method it is possible to test for elasticity below Baker's limit. It is then found that lead single crystals, specimens containing several large crystals and even multi-crystal specimens have a definite Hooke's Law region of elastic behavior with no creep.

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### SOME PROPERTIES OF SINGLE CRYSTALS OF BETA BRASS

WAYNE WEBB

A set of twenty beta brass single crystals has been grown and an optical method devised for determining the orientation of the