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Thermoelectric Effect in Single Crystal Zinc Wires

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ture of the crystal. A greater number of crystals must be examined and compared.

The experimental method used is one described in Scientific Papers No. 471, U. S. Bureau of Standards, and consists essentially of an oscillator capable of various frequencies and a measuring circuit coupled to the oscillating circuit. The capacity as well as the resistance of the specimen is thus measured when the two circuits are in resonance with each other.

THERMOELECTRIC EFFECT IN SINGLE CRYSTAL ZINC WIRES

E. G. LINDER

(*ABSTRACT*)

The work reported is a continuation of measurements published in the Physical Review for October, 1925. The thermol e.m.f. of the zinc crystals against copper has been measured from -182°C to 480°C for crystals having orientations from about 10° to 90° . The relation between thermoelectric power and temperature is definitely not linear, but may be represented fairly well by a second degree equation.

The nature of the effect in the neighborhood of the melting point will be discussed.

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NOTE ON THE REVERSAL OF THE SODIUM LINE

L. B. SPINNEY

(*ABSTRACT*)

The reversal of the sodium line may be demonstrated without the use of a slit or a spectroscope. An incandescent lamp having either a carbon or tungsten filament is placed immediately behind a good sodium flame and viewed from a distance of fifteen or twenty inches through a diffraction grating. The first- and second-order spectra, right and left, will both be in view and in the orange-yellow region of each will appear a sharp dark-line image of the filament of the lamp. This image constitutes the dark-line spectrum of the sodium vapor.

A Meker burner on which a few crystals of fused salt have been