

1939

## Freezing Point Curves of Iodine Monochloride Mixed with Iodine, Acetic Acid, or Carbon Tetrachloride

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### Recommended Citation

Cornog, Jacob and Olson, Leonard (1939) "Freezing Point Curves of Iodine Monochloride Mixed with Iodine, Acetic Acid, or Carbon Tetrachloride," *Proceedings of the Iowa Academy of Science*: Vol. 46: No. 1 , Article 36.  
Available at: <https://scholarworks.uni.edu/pias/vol46/iss1/36>

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used to show the apparatus used (including the wedge sector), typical spectrograms, and also to show some of the data obtained in graphical form.

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### FREEZING POINT CURVES OF IODINE MONOCHLORIDE MIXED WITH IODINE, ACETIC ACID, OR CARBON TETRACHLORIDE

JACOB CORNOG AND LEONARD OLSON

The curve obtained with iodine differs from the curve obtained by previous workers; the acetic acid curve approximates expectation based on Raoult's Law; the carbon tetrachloride curve indicates the formation of solid substances.

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### THE SOLUBILITY OF IGNITED FERRIC AND CHROMIC OXIDES

JACOB CORNOG AND DOROTHY BUCK

In the gravimetric determination of iron the metal is frequently precipitated as the hydroxide by ammonia. It is then collected by filtration, dried, ignited and weighed as the oxide. Such precipitates when wet, as hydroxides, dissolve instantaneously in acids. After the precipitate has been ignited it often becomes practically insoluble. Such ignition gives a range of temperature of 600°-1000°C, depending on the type of heating device used. Kolthoff and Sandell suggest the fusion of this ignited ammonia precipitate with alkali pyrosulfate "in order to convert the oxides into sulfate which then can be dissolved." This procedure is troublesome because the alkali must then be removed before the iron is determined either volumetrically or gravimetrically.

Chromium is not usually determined in this way because the