THE FREEZING-POINT, BOILING-POINT, AND CONDUCTIVITY METHODS

Published @ 2017 Trieste Publishing Pty Ltd

ISBN 9780649351909

The Freezing-point, Boiling-point, and Conductivity Methods by Harry C. Jones

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HARRY C. JONES

THE FREEZING-POINT, BOILING-POINT, AND CONDUCTIVITY METHODS



Freezing-Point, Boiling-Point,

----AND----

Conductivity Methods

-BY-

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RASTON, PA.: CHREICAL PUBLISHING CO. 1897

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PREFACE

I have been impressed, in teaching the physical chemical methods in the laboratory, with the fact, that there is no readily accessible place in which they are treated satisfactorily from both the standpoint of theory and of practice. In the text-books, the theoretical side is developed, and usually without sufficient attention to the details of manipulation, to enable them to be applied successfully in the laboratory. In the laboratory manuals, on the other hand, these methods are often treated largely from the mechanical side, and their theoretical bearing might thus be lost sight of.

The physical chemical methods, which find most frequent application in the laboratory, are probably those based upon the lowering of the freezing-point, and the rise in the boiling-point of a solvent, produced by a dissolved substance, and the electrolytic conductivity of solutions of electrolytes. It is my chief object in preparing this little work to give an account of the operations involved in carrying out these methods in the laboratory. But since the mere mechanical application of any scientific method is a matter of comparatively little significance, I have aimed to give, also, enough of the theoretical ground on which each of them rests, to enable the student to work with them intelligently, and to see clearly their scientific significance and use.

HARRY C. JONES.

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