# AN OUTLINE OF THE THEORY OF SOLUTION AND ITS RESULTS. FOR CHEMISTS AND ELECTRICIANS

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An Outline of the Theory of Solution and Its Results. For Chemists and Electricians by  $\,$  J. Livingston R. Morgan

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# J. LIVINGSTON R. MORGAN

# AN OUTLINE OF THE THEORY OF SOLUTION AND ITS RESULTS. FOR CHEMISTS AND ELECTRICIANS



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TO

## Professor Br. Wilhelm Ostwald,

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OF THE UNIVERSITY OF LEIPZIG.

THIS LITTLE BOOK IS RESPECTFULLY

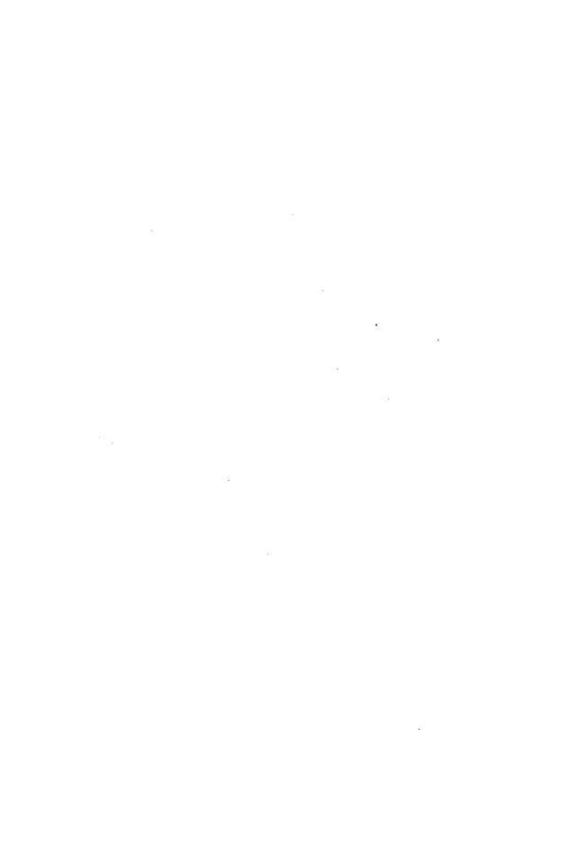
## DEDICATED

AS A SMALL TOKEN OF

GRATITUDE AND ESTEEM

BY

THE AUTHOR.



# PREFACE.

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A KNOWLEDGE of the Theory of Solution and its results is so important, to workers in all branches of chemistry and electricity, that the following pages have been compiled, containing an elementary treatment of the subject, which is advanced enough to enable the reader to follow the work which is being done to-day. The essence of them is to be given in a course of four lectures, by the author, before the Brooklyn Institute of Arts and Sciences in March. The mathematical part has been omitted as much as possible, but references are given. If by this sketch the author can induce any one to go deeper into the subject, he will feel more than repaid for his work. To any such, the following books are very highly recommended:

Ostwald: Lehrbuch der allgemeinen Chemie. 2 vols. Leipzig (1892-7).

Ostwald: Scientific Aspects of Analytical Chemistry. Trans. by McGowan. Macmillan, 1896.

Le Blanc: Lehrbuch der Elektrochemie. Leipzig, 1896.

J. L. R. M.

POLYTECHNIC INSTITUTE, BROOKLYN, January, 1897.



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