

**TEXT-BOOKS OF CHEMICAL  
RESEARCH AND ENGINEERING;  
AN  
INTRODUCTION TO THE PHYSICS  
AND CHEMISTRY OF COLLOIDS**

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Text-Books of Chemical Research and Engineering: An Introduction to the Physics and Chemistry of Colloids by Emil Hatschek

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**EMIL HATSCHEK**

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AN INTRODUCTION TO  
THE PHYSICS AND  
CHEMISTRY OF COLLOIDS

BY  
EMIL HATSCHEK

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## PREFACE TO THIRD EDITION.

SINCE the second edition of this book was published several larger text-books in English, as well as a translation of Ostwald's work, have appeared ; and the author has therefore thought it unnecessary to enlarge the compass of the third edition materially.

A number of small corrections and additions have again been made so as to include such recent advances as fall within the purview of a brief introduction to this branch of science.

EMIL HATSCHEK.

## PREFACE TO FIRST EDITION.

THE present work is a slightly enlarged reprint of a series of articles published in *The Chemical World*, which in their turn were based on a course of ten lectures delivered at the Sir John Cass Technical Institute to students of very varied attainments and interested in every branch of chemistry and of chemical industry. The book accordingly does not aim at a completeness precluded alike by its compass and the extremely vigorous growth of the subject, but is only intended to introduce readers with a reasonable knowledge of physics and chemistry to the fundamental facts and methods of a branch of physical chemistry, on the importance of which it is hardly necessary to insist.

Certain features in the selection of subjects and in the order of presenting them, which will be apparent to readers familiar with the existing literature, are due to a vivid recollection of the difficulties experienced by the author in his first studies, and the desire to spare the student as many of these as appear avoidable. Those desirous of ampler and more detailed information are referred to Wolfgang Ostwald's "Grundriss der Kolloidchemie" and H. Freundlich's "Kapillarchemie," English translations of which are urgently required.

EMIL HATSCHEK.

LONDON, 1913.



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