

**A SYSTEMATIC COURSE OF  
QUALITATIVE CHEMICAL  
ANALYSIS OF INORGANIC AND  
ORGANIC SUBSTANCES, WITH  
EXPLANATORY NOTES**

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A systematic course of qualitative chemical analysis of inorganic and organic substances, with explanatory notes by Henry W. Schimpf

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**HENRY W. SCHIMPF**

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**WORKS OF DR. H. W. SCHIMPF**

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A SYSTEMATIC COURSE  
OF  
QUALITATIVE  
CHEMICAL ANALYSIS  
OF  
INORGANIC AND ORGANIC SUBSTANCES

WITH EXPLANATORY NOTES

BY

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**California College of Pharmacy**

THIRD EDITION, REVISED

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of PHARMACY

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(disc. by  
Col. (Hm.))

## PREFACE TO THE THIRD EDITION.

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THE exhaustion of the second edition of this book and the greatly increased demand for it, have encouraged the author to publish a new and revised edition.

In the latter, the features which made the former edition valuable to students have been retained, but a careful revision has been made and much new matter added. The scheme for the acids is greatly improved and many charts have been introduced which it is believed will add to the usefulness of the book.

The author is very much indebted to Dr. Joseph S. Goldwag for the considerable work he has done in the revision and for the introduction of many new charts as well as for his careful proofreading and indexing.

It is hoped that the new edition will meet with the same generous appreciation as was accorded the former.

HENRY W. SCHIMPF.

iii

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## PREFACE TO FIRST EDITION.

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THIS book has been prepared for students in pharmacy. It is based mainly upon the lectures on analytical chemistry and on the hectographed notes on the laboratory exercises which have been delivered to the students of the Brooklyn College of Pharmacy during the past few years. When a student has but a few months to devote to the study of analytical chemistry it is not advisable to burden his mind by compelling a study of chemical peculiarities which are prominent only because of their technical use in analysis, but rather to eliminate them, and direct his studies to the more characteristic chemical reactions. With this in view the author has endeavored to encompass in a small book most of the inorganic as well as organic qualitative reactions that a student of pharmacy is required to know. The first part of the book explains some of the elementary principles of chemistry, notation and nomenclature, and prepares the student for what follows. The second part describes the analytical reactions of the metals and acids of pharmaceutical interest, and includes schemes and tables for use in analytical work.

The third part treats of the qualitative analytical reactions of organic substances, and includes tests for official alkaloids and synthetic compounds, as well as other organic substances used in medicine; also schemes for the detection of

poisons, the analysis of urine, and an article on the preparation of reagents.

The final *e* is dropped from the names of halogens and binary compounds, but is retained in the case of the alkaloids so as to avoid confusing them with glucosides. Chemical equations are given for most of the reactions in the inorganic part and for many of the reactions of organic substances, as it is believed that they greatly assist in gaining a clearer insight into chemical action. The author has given credit in the text wherever due, and besides this he acknowledges his indebtedness to the United States Pharmacopœia, Eighth Decennial Revision, and to Prof. Elias H. Bartley and Dr. Joseph Mayer, for their contributions and valued suggestions; and he especially expresses his thanks to Dr. I. V. Stanley Stanislaus for the considerable work he has done in the preparation of this book.

H. W. S.

NEW YORK CITY, N. Y.,  
October, 1905.

## CONTENTS.

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### PART I.

	PAGE
DEFINITIONS AND GENERAL CONSIDERATIONS.....	1
Notation, Classification and Nomenclature.....	7

### PART II.

IDENTIFICATION AND SEPARATION OF INORGANIC BASES AND ACIDS..	17
The Metals.....	20
Group I.....	24
Group II.....	30
Group III.....	48
Group IV.....	61
Group V.....	67
Preparation of a Solution for Analysis in the Wet Way.....	75
Alloys and Hard Metals.....	78
Table of Solubilities.....	81
The Acids.....	87
Systematic Analysis for the Acid.....	88
Characteristic Tests for Individual Acids.....	91
Group A.....	91
Group B.....	96
Group C.....	106
Group D.....	110
Group E.....	114
Group F.....	121
Group G.....	124

### PART III.

QUALITATIVE ANALYSIS OF ORGANIC SUBSTANCES.....	127
Procedure for Detection of Ultimate Constituents of Organic Substances.....	127