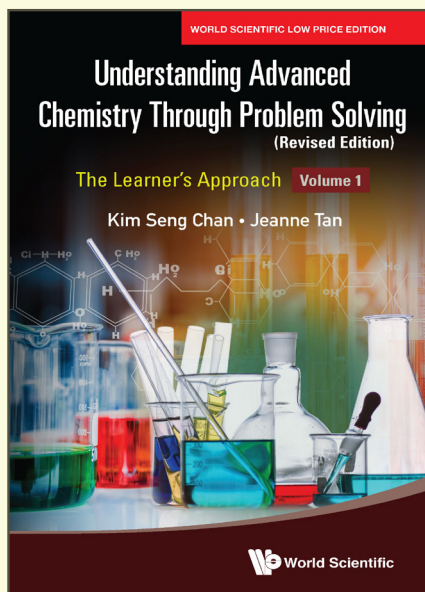


Understanding Advanced Chemistry Through Problem Solving

The Learner's Approach (Volume 1) Revised Edition



By **Kim Seng Chan** and **Jeanne Tan**

ISBN	9798886130355
Extent	340pp
Binding	Paperback
Year	2024
Price	Rs. 1195

ABOUT THE BOOK

Written for students taking either the University of Cambridge Advanced Level examinations or the International Baccalaureate examinations, this guidebook covers essential topics and concepts under both stipulated chemistry syllabi. The book is written in such a way as to guide the reader through the understanding and applications of essential chemical concepts using the problem-solving approach. The authors have also retained the popular discourse feature from their previous two books — Understanding Advanced Physical Inorganic Chemistry and Understanding Advanced Organic and Analytical Chemistry — to help the learners better understand and see for themselves, how the concepts should be applied during solving problems. Based on the Socratic Method, questions are implanted throughout the book to help facilitate the reader's development in forming logical conclusions of the concepts and the way they are being applied to explain the problems. In addition, the authors have also included important summaries and concept maps to help the learners to recall, remember, reinforce, and apply the fundamental chemical concepts in a simple way.

READERSHIP

Chemistry students taking O and A levels exam or IB exam or preparing for Singapore Junior Chemistry Olympiad.

CONTENTS

- **Physical Chemistry:**
 - Atomic Structure and the Periodic Table
 - Chemical Bonding
 - Ideal Gas and Gas Laws
 - Chemical Thermodynamics
 - Reaction Kinetics
 - Chemical Equilibria
 - Ionic Equilibria
 - Redox Chemistry and Electrochemical Cells
- **Inorganic Chemistry:**
 - The Periodic Table: Chemical Periodicity
 - Chemistry of Groups 2 and 17
 - Introduction to Transition Metals and Their Chemistry