

台灣大學 96 學年度第二學期
 開課系所：化學系
 課程編號：203 12910
 授課對象：化學系
 上課時間：每週四第 5、6 節
 上課地點：新生 202
 授課教師：彭旭明 教授

Structure and Chemical Bonding Syllabus

化學鍵

Feb. 2008 Shie-Ming Peng

Text Book:

1. Chemical Applications of Group Theory (3rd Ed), F. Albert Cotton, Wiley-Interscience.

1'. An Introduction to Molecular Orbitals, Author: Yves Jean and Francois Volatron, translated and edited by Jeremy Burdett, Oxford University Press.

Date	Contents
2 月 21 日	Chapter 1 & 2 Introduction & Definitions and Theorems of Group Theory
3 月 06 日	Chapter 3 Molecular Symmetry and The Symmetry Groups
3 月 13 日	Chapter 3 Molecular Symmetry and The Symmetry Groups
3 月 20 日	Chapter 4 Representations of Groups
3 月 27 日	Chapter 4 Representations of Groups
4 月 03 日	Chapter 5 Group theory and Quantum Mechanics
4 月 10 日	Some Applications
4 月 17 日	Midterm Examination
4 月 24 日	Chapter 3' Interaction of Two Atomic Orbitals on Different Centers
5 月 01 日	Chapter 4' The Fragment Orbital Method; Application to Some Model Systems
5 月 08 日	Chapter 5' Interactions Between Two Fragment Orbitals: Linear AH ₂ , Trigonal AH ₃ and Tetrahedral AH ₄
5 月 15 日	Chapter 6' Interactions Between Three Fragment Orbitals: AH, Bent AH ₂ and Pyramidal AH ₃
5 月 22 日	Chapter 11 Crystallography
5 月 29 日	Chapter 11 Crystallography
6 月 05 日	Chapter 11 Crystallography
6 月 19 日	Final Examination