

5,7,12,14-四甲基-1,4,8,11-四胺基十四元環銅 化合物的分子結構

Molecular Structure of (Dinitro-O,O')(C-meso- 5,7,12,14-tetramethyl-1,4,8,11- tetraazacyclotetradecane-N,N',N'',N''') copper(II)

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摘要：5,7,12,14-四甲基-1,4,8,11-四胺基十四元環銅錯化合物的分子結構為銅(II)的六配位扭曲八面體型結構，銅(II)利用十四元環上在 1,4,8,11 位置的四個氮離子進行赤道面的配位，而軸向則與兩個硝酸根進行配位而形成八面體型結構，並形成兩組椅型六環與兩組半椅型五環結構。十四元環上不對稱氮與碳的構型分別為 1RS, 4RS, 8SR, 11SR 與 5SR, 7RS, 12RS, 14SR。四個 Cu-N 鍵的鍵長為 2.028(2)~2.033(2)埃之間，而軸向的 Cu-O 鍵的鍵長為 2.504(2)Å；O1-Cu-O1A，N1-Cu-N2 與 N1-Cu-N2A 的鍵角則分別為 180.0(1)，85.5(1) 與 94.5(1)度。

關鍵詞：四胺基十四元環，八面體型，大環，不對稱

Abstract: The crystal structure of the title compound, C₁₄H₃₂CuN₆O₆, is six-coordinated in a distorted octahedral geometry. The distorted octahedral coordination of central Cu(II) ion is achieved by an N₄ donor set from the macrocyclic ligand, with the four N atoms in equatorial and two NO₃⁻ anions in axial position. The macrocyclic ligand adopts its most stable conformations with two six-membered in chair form and two five-membered rings in gauche form. The configurations of four chiral N atoms and four chiral C centers are 1RS, 4RS, 8SR, 11SR and 5SR, 7RS, 12RS, 14SR, respectively. The Cu-N bond distances are 2.028(2)~2.033(2)Å and the Cu-O bond distance is 2.504(2)Å. The angles of O1-Cu-O1A, N1-Cu-N2 and N1-Cu-N2A are 180.0(1), 85.5(1) and 94.5(1)°, respectively.

Key words: tetraazacyclotetradecane, octahedral, macrocyclic, chiral

豬隻廢棄物焚化動力研究

Kinetic study of pork incineration

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摘要：焚化法為畜牧業之病死牲畜最佳中間處理技術，可以有效地達到減容與滅菌之功效，然而牲畜焚化之過程變化行為之探討仍很缺乏，本研究藉由簡單小型高溫爐針對豬肉之肉質部分進行焚化模擬，以觀察豬肉焚化過程之變化與熱解動力特性，以提供焚化設計與操作之參考。實驗結果顯示豬肉不同肉質部位於不同溫度下焚化有不同之分解過程與分解速率，油脂層於爐溫 600°C 下分解過程有明顯地兩種分解速率被觀察到，以肉質之含水率為分界點，而於 700°C 以上則此兩階段分解速率不易被觀察到；而純瘦肉部分可能受肉質含水率較高所致，分解變化大都維持一致性。整體而言，豬肉油脂區與純瘦肉區分別代表肉質分解最快與最慢之兩個區域，其餘肥瘦摻雜之分解速率則介於兩者之間。此外，本研究亦有利用實驗數據推導出簡單動力方程式以供參考，肥肉與瘦肉之燃燒分解速率分別為

$$-\frac{dM}{dt} = 1.049 \exp(-2644.2/T) M^{0.546} \quad \text{與} \quad -\frac{dM}{dt} = 0.478 \exp(-3650.5/T) M^{0.583}。$$

關鍵詞：豬肉、熱解、焚化、活化能

Abstract: The objective of this research was to study the incineration of four parts of pork. Experiments were performed in a simulated isothermal combustor. Pork combustion process was observed, and the weight change of the pork with various fat and lean meats in pyrolysis and burning steps at different isothermal temperatures was recorded. These experiments allow us to derive an empirical equation for the burning steps.

Key words: pork, pyrolysis, incineration, kinetic

通識教育中的「兩性教育」課程教學 成效之 評估—以某校「幸福婚姻與家庭講座」課程 為例

Instructional Effect of Gender Issues on General Education: Case Study of a Course in Marriage and Family in University Setting

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摘要：性別教育在西方國家中早已相當普及，然而「兩性教育」究竟應該有什麼面貌？應該以何理念為基礎？對許多大專院校及開課老師而言，仍是未達共識的局面。在兩性教育需求日益突顯的今日，將正確的性別觀念及兩性相處互動的知識，融入大學生的通識教育課程中，則不失為一種加強兩性合宜互動的方法。本文嘗試提供我國兩性教育的歷史脈絡，並探討學者、專家對大專院校通識教育中的「兩性教育」課程的相關意見，以訂定通識教育中「兩性教育」的課程目標。文中並藉由作者教授「幸福婚姻與家庭講座」課程的經驗，從課程的設計、教學的方法、作業的實施，以及課後學生的反應與意見，顯示教學活動與學習成效良好；但在教學的過程中，也發現學生大都喜歡多樣化的上課方式，卻又抱怨負擔過重，再則，對於問題的批判與表達能力普遍不足。文中綜合學生的看法與教授的經驗，進一步提出相關建議，期使未來大專院校在規劃通識教育的「兩性教育」相關課程時能更完善。

關鍵詞：兩性教育課程、通識教育

Abstract: Although Gender Studies is a universal program in western countries, the instructors teaching General Education in Taiwan's colleges still have not reached a common agreement for Gender Studies on the teaching methodology and on the basis of this topic. Nowadays, the need for proper sexual educations becomes increasingly important in Taiwan. Combining the correct concepts of sexuality and appropriate knowledge of sexual interaction together and immersing them into the courses of Gender Studies in colleges may improve the interaction of the youth in Taiwan. In this paper, I have tried to trace back the recent history of sexual educations in Taiwan. After reviewing the related studies, I have specially designed a course of marriage and family in a college. I keep finding that the students could gain a lot of useful skills and knowledge from my instructional experience. The feedback of students' evaluations reflects that the materials in class have been proved to be effective by many students in

daily life. Based on the opinions and improvements of students, there are several suggestions provided for teaching Gender Studies in General Education at colleges.

Key words: Gender Studies, General Education

略論唐詩中的行旅活動與觀照心態

To State Briefly in the Poems of The Tang Dynasty of Traveled Activities and the Attitude of Mind of Care of Observations

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摘要：本文旨在分析唐代文士的旅遊活動與詩中的心態反應，探討唐詩中所涉及的行旅活動的幾種類型：例如遊學科舉、宦遊遷謫、求仙採藥及文人才子的夜遊、藩鎮幕僚集體的遊賞等活動。這些遊歷又可分為主動的旅遊、被動的旅遊。透過目遊與神遊，詩人們往往將旅途所見之景與一己的情感相結合，而投射出歡愉或愁苦的心情，或神馳九天的仙境夢想。探討唐人觀照景物的方式則有定點俯仰式、動線迴繞式、拼接組合式與全方位跳躍式等，對於進一步探究唐代山水詩歌的興盛及演變都是有所裨益的。

關鍵詞：旅遊、目遊、神遊、遷謫、藩鎮

近二十年來 (1980-2000) 臺灣學者有關中國 近代詩/學之研究述評

Chinese Modern Poetry/Poetics in Taiwan Scholars-- from 1980 to 2000

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摘要：本文所謂「近代詩/學」，意指 1840-1919 年間所出現的詩學理論、詩人及其詩歌的相關研究，詩人群所橫跨的範圍，起自「近代文學的開山主：龔自珍」，迄於民國南社時期諸詩人。在這八十年當中，近代中國文學發生劇烈轉變，其中以詩歌所面臨的陣痛最為明顯。自黃遵憲「我手寫我口」以降，至梁啟超高喊「詩界革命」以來，為詩歌的書寫標明一道清晰的發展軌跡；而傳統的詩歌寫作仍為人們熟悉的領域，詩話著作亦不曾消歇。民國以後，胡適承繼「革命」的精神，宣告白話詩的開始。因此，本文所指涉的「近代詩學」，乃狹義觀點下的「詩」，不包括「詞」、「曲」在內。準此，本文針對臺灣地區相關研究成果的選取，以 1980-2000 年間所出版的相關研究為主，因此大陸地區人士在臺灣的相關出版品，不擬列入本研究概況中加以評析，以真正鑑別出「臺灣」一地的相關研究成果。同時，以下分為「專著」、「博碩士論文」及「期刊論文」、「會議論文」四部分加以述評。

關鍵詞：近代詩歌、近代詩學、近代詩人、詩學理論

Abstract: “Modern poetry and poetics” means poet theory , poets and relative researches about poets from 1840 to 1919. Poets limited from Kung, Tzu Chen , the leader of modern literature, to writers of South Association in modern China. Within these eighty years, the throes of turn of poetry were apparent. From “my hands write what I said” revealed by Huang , Zuan Xian , to “revolution in poetry” announced by Liang, Chi Chao, they marked a clear track of development about writing poetry. But traditional approach was still existed. Hu, shi inherited the spirit of “revolution” and announced the beginning of vernacular poetry. So ”modern poetry” in this paper included pure”poetry” only and didn’t contain “Tsz” and “Chyu”. According to this definition, in order to distinguish the publications of pure “Taiwan” area, the writings of poetry in Taiwan limited from 1980 to 2000, and didn’t contain writings of Mainland China. We divided them into four parts and discussed. Five parts concluded specialty, dissertation and thesis, paper and conference paper.

Key words: modern poetry, modern poetics, modern poet, theory of poetics

應用文化教學於語言教學

Teaching Culture in Language Teaching

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摘要：文化知識在語言認知過程中扮演極為重要角色之一。因此文化知識和東西文化差異，理所當然於課程中教授，並且於課堂中由學生討論。除此之外，應用不同途徑，無論是明白陳述的教授，或不明言的學習文化知識。網際網路可無限期應用於教於學之中，成為豐富之文化來源。

關鍵詞：不明言、明白陳述

Abstract: Cultural knowledge is regarded as one of the most important part of language acquisition. So cultural knowledge and the differences of the two countries should be taught in my classroom in Taiwan and are discussed in classroom. In addition to the different channels of explicit teaching and implicit learning of cultural knowledge, the Internet again can be used as an updated, rich source of cultural knowledge.

Key words: implicit, explicit