

## 目 次

### 今日化学

- 聚丙烯腈分离膜表面的酶固定化研究进展 ..... 吴青芸 万灵书 徐志康 (1)

### 教学研究与改革

- 高校实践类课程改革的理论基础及实践研究之一——基本取向与突破口 ..... 黄都 卢昕 蒋毅民 等 (8)  
海峡两岸微型化学实验之发展 ..... 周宁怀 (13)  
利用本科生科研训练平台培养高素质人才 ..... 朱亚先 夏海平 袁友珠 等 (17)  
综合性大学基础化学实验(一)教学改革 ..... 林金华 (20)  
培养高师学生的化学学习能力 ..... 苗深花 韩庆奎 张雨强 (24)  
物理化学课堂教学中多向交流的教学模式探索 ..... 庞秀江 陈利 孟阿兰 (28)  
以案例教学教给学生分析化学家的思维方式 ..... 李娜 刘锋 李克安 (31)  
波谱分析课程教学的实践与思考 ..... 曹书霞 廖新成 (36)  
精细化工教学改革的探索与实践 ..... 杨继生 (39)  
化工热力学学习题改革初探 ..... 吕玲红 冯新 刘畅 等 (42)  
论四大滴定理论内容整合与教材改革 ..... 岳宣峰 张延妮 漆红兰 等 (47)

### 计算机与化学

- POLYMAT 软件在化工课程中的应用 ..... 李学慧 吴正舜 伍强贤 等 (50)

### 化学实验

- 沉淀聚合合成聚丙烯酸及其多角度分子表征——推荐一个高分子化学综合实验 ..... 杨琥 谌东中 (55),  
一种简易植物提取装置的应用 ..... 王涛 陈慧宗 彭以元 等 (60)

### 师生笔谈

- 平衡态近似及其与稳定态近似的关系 ..... 刘国杰 黑恩成 (62)  
关于稀溶液依数性讲解中的几个问题讨论 ..... 高胜利 陈三平 谢钢 等 (66)  
谈元素电子构型的速写 ..... 王纪学 张智敏 (70)

### 自学之友

- 道尔顿体和柏托雷体——晶体结构视角的理解 ..... 荆西平 (73)  
三分子化学反应——一个未被证实的假设 ..... 罗渝然 俞书勤 张祖德 等 (81)  
基于 p 值流程图计算水溶液酸碱度的方法 ..... 熊言林 余婵娟 马善恒 (85)

### 动态与信息

- 《分析实验室》技术期刊征订启事 (35) 欢迎订阅 2011 年《大学化学》(80)

## CONTENTS

### Chemistry Today

- Enzyme Immobilization on Polyacrylonitrile-based Membranes ..... Wu Qingyun, Wan Lingshu, Xu Zhikang ( 1 )

### Study and Reform of Chemical Education

- A Study of the Theory and Practice for the Reform of Practical Courses ( I )—The Main Goal and Breakthrough ..... Huang Du, Lu Xin, Jiang Yimin, et al ( 8 )  
A Review on Development of Microscale Laboratory in Both Sides of the Strait ..... Zhou Ninghuai ( 13 )  
Cultivating Innovative Ability through Scientific Research Training ..... Zhu Yaxian, Xia Haiping, Yuan Youzhu, et al ( 17 )  
Reform on Basic Experimental Chemistry ( I ) ..... Lin Jinhua ( 20 )  
On Fostering Students' Ability of Learning Chemistry in a Normal University ..... Miao Shenhua, Han Qingkui, Zhang Yuqiang ( 24 )

- How to Maintain Multi-lateral Communications in Teaching Physical Chemistry ..... Pang Xiujiang, Chen Li, Meng Alan ( 28 )  
Teaching Students to Think as Analytical Chemists through Case Study ..... Li Na, Liu Feng, Li Kean ( 31 )  
On the Teaching of Spectroscopic Analysis ..... Cao Shuxia, Liao Xincheng ( 36 )  
Exploration and Practice on Teaching Fine Chemicals ..... Yang Jisheng ( 39 )  
Innovation of Exercises for Chemical Engineering Thermodynamics ..... Liu Linghong, Feng Xin, Liu Chang, et al ( 42 )  
On Integration of the Titration Theories and Reform of the Textbook ..... Yue Xuanfeng, Zhang Yanni, Qi Honglan, et al ( 47 )

### Computer and Chemistry

- The Application of Polymath Software in Solving Problems of Chemical Engineering Courses ..... Li Xuehui, Wu Zhengshun, Wu Qiangxian, et al ( 50 )

### Chemistry Laboratory

- Synthesis of Poly(acrylic acid) by Precipitation Polymerization and Its Extensive Molecular Characterization ..... Yang Hu, Chen Dongzhong ( 55 )  
Application of a Facile Plant Distillation Apparatus in Organic Chemistry Experiments ..... Wang Tao, Chen Huizong, Peng Yiyuan, et al ( 60 )

### Between Teacher and Student

- Equilibrium Approximation and Its Relation with Steady-State Approximation ..... Liu Guojie, Hei Encheng ( 62 )

- Discussion on Colligative Properties of Dilute Solutions ..... Gao Shengli, Chen Sanping, Xie Gang, et al ( 66 )  
On Sketch of the Electronic Configuration of Elements ..... Wang Jixue, Zhang Zhimin ( 70 )

### Self Studies

- Daltonide and Berthollide—Viewed from the Point of Crystallography ..... Jing Xiping ( 73 )  
The Termolecular Reactions—An Unidentified Assumption ..... Luo Yuran, Yu Shuqin, Zhang Zude, et al ( 81 )

- A Method of Calculating Solution pH Based on the p-Values Flowchart ..... Xiong Yanlin, Yu Chanjuan, Ma Shanheng ( 85 )