

国际标准连续出版物号: ISSN 1007-1865

国内统一连续出版物号: CN44-1238/TQ

半月刊 创刊于1974年

广东化工

Guangdong Chemical Industry

全国石油和化工行业优秀期刊一等奖

《中国核心期刊(遴选)数据库》全文收录期刊

中国学术期刊综合评价数据库统计源期刊

美国《化学文摘》(CA)重点收录期刊

《中国学术期刊(光盘版)》收录期刊

广东省优秀科学技术期刊

2017 **11**
6月上半月刊

第44卷(总第349期)

主办单位: 广东省石油化工研究院

佛山市华联有机硅有限公司

FOSHAN HUALIAN ORGANOSILICON CO., LTD



本公司是一家专业从事有机硅产品研究、开发、生产的股份合作企业, 曾是国内第一家中外合资的有机硅公司, 为我国的有机硅事业的发展做出了卓有成效的贡献。为了确保最终的产品满足顾客的要求, 我们已于2001年成功导入ISO9001:2000质量管理体系, 对原材料选购到成品出厂以及售后服务整个过程进行持续的监控, 确保最终的产品满足顾客的要求。

ISSN 1007-1865



万方数据

地址: 广东省佛山市三水区乐平镇三水中心科技工业园B区13号

电话: 0757-87388188 传真: 0757-87381986

华东地区总代理: 上海海谊化工有限公司

电话: 021-52915425

E-mail: fos757@vip.163.com <http://www.hlyjg.com>

广东化工(半月刊)

第四十四卷 第十一期 (总第三百四十九期)

二〇一七年 六月上半月刊

广东化工

目次

Guangdong Chemical Industry

第44卷 第11期 6月上半月刊
(总第349期)

1974年创刊 (半月刊)

刊号 ISSN 1007-1865
CN 44-1238/TQ

- 全国石油与化工行业优秀期刊一等奖
- 高、中级化工职称资格评审认定刊物
- 中国核心期刊(遴选)数据库收录期刊

主 管: 广东省广业科技集团有限公司

主 办: 广东省石油化工研究院

社 长: 麦裕良

出版发行: 《广东化工》编辑部

发行范围: 国内外公开发行

地 址: 广州市越秀区越华路116号

邮 编: 510030

电话/传真: (020) 83302517 83336009

在线投稿: <http://www.gdchem.com>

电子邮箱: gdcic200@163.com

广告经营许可证号: 440000100138

印 刷: 广州家联印刷有限公司

订 购: 全国各地邮局、所

邮发代号: 46-211

出版日期: 2017年6月15日

邮局全年定价:

国内480元; 国外384美元

公告: 经广东省新闻出版局批准同意,
本刊从2012年7月开始变更为半月刊。

◆ 试验与研究

- 1 滤筒长度对滤筒除尘器内流场的影响数值模拟研究 余欢, 于瑞莲, 蔡伟龙, 等
- 4 4-(3-哌啶基)苯胺及其酒石酸盐的制备方法 班浩, 薛晓文
- 6 氮对钌配合物的电子结构及相关性质的影响 王菊平, 谢灿乐
- 9 新型页岩气田压裂用低密度支撑剂的研制 严思明, 杨坤, 史素青, 等
- 12 一种 Caspase 抑制剂恩利卡生的合成 程伟, 汪荀, 陈国华
- 13 基于香豆素衍生物的铕离子荧光探针作用机理的理论研究 刘清玉, 陈军宪
- 15 W-Cu-Zr 三元系相图 900°C 等温截面的测定 龚洁明, 余津要, 周哲, 等
- 18 磷胆离子水溶性成分的含量测定及提取工艺 谢加庭, 吴燕红, 杨凡, 等
- 20 雷西纳德类似物的设计与合成 田森群, 陈国华, 戚志远, 等
- 22 热活化过硫酸盐氧化去除木质素降解产物混合物 张晨, 师林丽, 朱均均, 等
- 25 有机酸活化淀粉用于聚丁二酸丁二醇酯/热塑性淀粉共混物的研究 殷悦, 曹有名, 饶振中
- 27 改性油茶果壳对全氟辛酸磺酸盐的吸附性能研究 李婷婷, 蔡小华, 符仁俊
- 30 阿司匹林高效合成实验及控制条件研究——以碱作为催化剂 刘蓉蓉, 茅斯丰, 侯普民
- 32 微波法制备膨胀石墨影响因素分析 陈晨
- 34 发根杆菌诱导蚕豆毛状根的研究 钱志军, 吴国峰, 杨波, 等
- 36 初探用转矩流变仪快速评价尼龙用热氧稳定剂 廖献就, 彭婷婷, 李敏英, 等
- 39 铝离子快速简便的共振散射光谱分析 陈静, 顾云, 张大顺, 等
- 41 铁酸镁催化降解废弃塑料的初步研究 何江, 周旭敏, 曾惠敏, 等
- 43 粉煤灰对酸性大红染料废水的脱色研究 朱慧琴, 张小里, 王彦雄
- 44 负载铁催化剂制备及催化蓖麻油裂解 詹根权, 刘戈路, 许小莉, 等
- 48 秸秆液化的工艺研究 罗保民, 李芬芬, 蒋婷婷, 等
- 51 铂/二氧化锡/石墨烯复合催化剂的制备及其催化甲醇氧化性能 许丹妮, 郭洋洋
- 53 响应面法优化五桠果叶木姜子挥发油的提取工艺研究 曾立, 向荣, 傅春燕
- 55 瓜馥木抗肿瘤活性研究 王文豪, 尹辉斌, 庄湛新
- 57 矩形多槽道热管传热性能的实验研究 赵玉奎, 梅雪, 陈珍, 等
- 60 阿魏酸脂质体的处方筛选及体外释放实验 刘辉, 熊波, 陈磊, 等
- 62 凉茶中对乙酰氨基酚酶联免疫检测方法的研究 成少锋, 林宝敏
- 64 烟用三乙酸甘油酯水分测试影响
- 65 生物质电厂燃料中氯含量测定样品前处理方法对比研究 陈伟, 张宏亮, 毕武林, 谢勇, 康纪红, 冯黎明
- 68 白色半透光聚酯薄膜的开发及性能研究 冯绮澜, 何赞端, 周绮婷
- 70 基于主成分分析法对广东省北江某水源地的水质评价 李江, 蔡艳, 余之蕴, 等
- 73 酶联免疫法对食用油中黄曲霉毒素 B1 的检测 区桂珊, 唐健新, 苏章轩, 等
- 75 灵芝孢子蜂胶质量标准研究 莫健文
- 77 PFS-PDM 复合混凝剂对东江水净化处理及其混凝性能研究 谢志昆
- 80 等离子体处理对 PVC 封边条性能影响 田俊玲, 雷周桥
- 82 电子行业用湿固化聚氨酯热熔胶的制备及性能研究 陈坤杰
- 84 关于水泵喷涂高分子超滑涂层的节能效果简析 余德福, 吴勇基, 梁余威, 等
- 86 三氯化铁蚀刻废液除铬的研究 王璇
- 88 一种可回用瓜尔胶压裂液体系的研究 杨春发, 方泽华, 刘庆辉, 等
- 92 植酸钙的提取研究 范丽萍
- 94 八乙烯基笼形倍半硅氧烷(OvPOSS)的合成、表征 岳琴
- 96 磷石膏做水泥缓凝剂的改性工艺探究及其性能影响 陈朋朋, 蒋慧华, 周晓军, 等
- 99 2-氯乙基丙基醚的合成方法研究 付国
- 100 GE 水煤浆气化工艺配煤技术经济研究与应用 汪龙, 鲁朝, 匡望
- 102 膨润土-砂混合材料对放射性核素 Cs⁺吸附能力的研究 李建雄
- 104 暂堵酸化技术研究应用 李健雄
- 106 茶皂素提取工艺的优化 张健文, 王锦锋, 罗国超, 等
- 108 轻型动力触探杆倾斜度对结果影响分析 李剑英, 黄文广
- 109 改性茶多酚多元醇的合成及其在硬质聚氨酯泡沫中的应用研究 林丽
- 111 不同产地黄芩中有机氯类农药残留量的比较研究 吴飞, 黄力, 李月侠, 等
- 113 正交试验法优化超声辅助提取茶叶中的茶多酚 谢彩玲, 熊文明, 黄勇, 等
- 115 呋喃甲醛缩 D-氨基葡萄糖 Schiff 碱及 Cu(II)配合物的合成与表征 张孝
- 118 电池用硝酸银除杂研究 贺新宸

◆ 专论与综述

- 119 针对去势抵抗性前列腺癌新型药物的研究进展 徐熙, 卞金磊, 李志裕

投稿指南

《广东化工》为半月刊，国内外公开发行，征稿范围：石油化工、医药化工、农药化肥、电化学、化工设计及装备、日用化工、食品化工、化工环保、工业水处理、涂料与油墨、胶粘剂、生物化工、燃气化工等学科和行业科技类文章。

投稿方式：

1. 在线投稿

为确保稿件即时到达我编辑部，并确保作者联系电话、通讯地址等信息准确、完整，投稿请上网使用本刊“在线投稿系统”，稿件将在第一时间获得处理。

在线投稿网址：www.gdchem.com

2. 邮箱投稿、查询(若“在线投稿”不成功，可使用邮箱投稿)

投稿 Email: gdic200@163.com

投稿邮件主题：第一作者名/稿件题目

《广东化工》理事会

理事长：

麦裕良(广东省石油化工研究院 院长)

理事：

李安喜(中石化集团公司茂名石化公司
经理,党委书记)

陈炳琳(茂名新华粤石化股份有限公司
董事长兼总经理)

崔茹平(中山凯达精细化工股份有限公司
副总经理)

邵建聪(茂名环星炭黑有限公司 总经理)

吴年发(广东寰球产业工程有限公司 董
事长)

黄志红(广东南方碱业股份有限公司 董
事长)

杨益新(广州农药厂 厂长)

《广东化工》欢迎网上在线投稿
www.gdchem.com

- 122 MBBR 工艺研究及应用现状 宋浩亮
124 基于双硫键自修复高分子材料研究进展 徐兴旺, 沈伟, 刘佳莉, 等
127 纤维化的分子机制及治疗进展 宋志强, 贺宇辰, 薛晓文
131 磁性石墨烯材料对重金属的吸附研究进展 余琦粟
133 反硝化墙去除地下水硝酸盐研究进展 胡杰军, 谭蕾蕾
135 烷醇酰胺衍生物类表面活性剂的研究进展 张一波
137 基于磁性离子液的萃取富集技术的应用进展 杜迎翔, 陈佳慧
140 硫酸钙晶须制备及应用综述 甄德帅, 梁爽, 张兴文, 等
142 微藻能源化利用进展综述 朱莺莺
145 住友精化公司在丙烯酸类高吸水性树脂领域的专利申请分析王换方, 周勇
147 硫酸法钛白生产工艺红石膏产生量分析 邓刚
150 风电冷却装置用冷却液的研究与发展 代杰, 吴健超, 刘建伟, 等
152 故障模式及影响分析在石化行业中的应用 李杏花
155 水中多溴联苯醚分析技术研究进展 徐小静
157 PVDF 电介质专利技术综述 周勇, 王换方
159 ICS-900 离子色谱仪的使用技巧与常见故障排除 谭健峰
161 水华蓝藻控制技术现状及研究进展 徐宪根, 曹慧敏, 陆森森, 等
163 关于热固性树脂供给侧改革的思考 王文卿
165 超临界 CO₂ 流体染色专利技术研究 郭开银, 张超, 魏强, 等
167 固相微萃取技术在样品前处理中的应用研究 伍莉莉, 邓海韬, 许国, 等
169 关于药包材软管标准的探讨 王一叶, 杨芳芳, 刘舜莉
170 浅谈国内裘皮染色加工专利技术研究分析 宋恒欢, 郭开银, 魏强, 等
172 离子交换床在纯水制备中的应用 张小平, 温权, 徐斌
175 现场混装乳化炸药的质量控制措施 刘晓文, 李建彬, 龚兵, 等
177 帕金森性精神病药物哌马色林的合成研究进展 张彦巧, 程玉红, 魏继龙, 等
178 假日对水厂加氯工安全生产的影响 王美韵
179 非卤素木材阻燃专利技术发展状况 李雨蔓, 龙颖
180 河南省铅锌冶炼行业发展现状 郭春霞, 刘德杰, 谢静, 等
184 从风险管理角度分析液氨与尿素作为火电厂脱硝还原剂的选择 叶晓惊
185 离子交换膜分离技术及其应用 黄文广, 李剑英
186 几种形式精细过滤器在海上油田含油污水精细处理中的应用比较分析 高晓蕾
188 广州市开发区危险化学品重大危险源企业存在的问题及事故预防对策 曾祥春
189 阻燃聚碳酸酯专利分析 谢松, 刘学武
191 锌氧化银蓄电池研究进展 倪文昊, 宋红磊, 肖岸萍
193 特种工程塑料聚苯硫醚的注塑成型技术 吴健文, 吴清鹤
195 对羟基苯甘氨酸对映体的制备及手性分析方法简述 杨兰芬, 董毅
199 聚离子液体在分离天然产物中的应用 王春燕
- ◆ **环境保护**
- 201 基于大数据架构的环境污染精准监测与决策平台的建设 戈燕红, 李五金
204 输变电工程环境影响评价的要点分析 吴文广, 刘寒, 李玲玲
206 臭氧/反硝化深床滤池联合深度处理卫生纸废水回用的工程实践 诸杰, 黄瑞林, 韩瑛英, 等
207 污泥间接热干化项目环境影响分析 何志锋, 梁华杰, 袁博威, 等
209 关于云浮与周边地区环境气象相似性的探究 许凡
212 关于蓝藻危害与防治 应佳薇, 张菁, 张丽娜
214 典型小型乡镇饮用水源污染治理技术初探 游正铨
216 关于建设项目环境管理中防护距离设置的探讨 刘耀
218 炼厂高浓度检修污水处理研究 陈浩云, 熊碧华
220 企业环境应急管理法定职责研究 柯钊跃, 韩娇
222 热脱附技术在化工场地六六六污染土壤中的工程应用研究 郑桂林, 谢湑, 薛天利, 等
224 臭氧氧化-曝气生物滤池联合工艺深度处理垃圾渗滤液的应用研究 郭炜
226 城市生活污水处理现状及存在问题的探讨 杨赛风, 李建忠, 邓宇涛
228 BCC 母液综合处理工艺优化与设计 胡春林, 汪春霞, 贺德
230 广东某污染土壤修复工程实例及总结 薛嘉乐
232 城市污染河涌沉水植物建植技术研究 张璐蓉
234 浅析江门市养猪场恶臭排放情况与防治措施 陈健洪, 陈树沛, 吴侨旭
235 广东省环境应急管理现状研究 孙贝丽
237 针织服饰生产废水处理实例 干仕伟
- ◆ **设计与装备**
- 238 往复压缩机输送管系振动分析与消振改造研究 许爱荣, 张力
240 先进控制在催化裂化装置上的应用 何艺, 汪同训
244 2#催化烟机开车后出现的问题及处理 周学峰
247 一起立式蒸汽锅炉爆炸事故原因分析与预防措施 李德忠
250 压缩机驱动方式选型分析 汪程刚
251 半圆管夹套容器的设计 刘炜
252 饮食业油烟在线监测系统的设计 周智全, 徐欢欢, 王蕾, 等

- 254 浅析CNG气瓶检验数据库的建立对CNG气瓶的检验及使用年限的重要性
周于
- 256 烷基化装置运行中酸腐蚀问题分析和预防措施
张斌

◆ 分析测试

- 258 微波消解-原子吸收测汞仪测定桃金娘果中汞的质量浓度
汤灿明, 石燕丽, 窦文洲, 等
- 260 利用离子色谱法测定水中碘化物的不确定度
苏彦, 冯良机
- 262 陈皮中重金属及有害元素检测
徐万帮, 苏章轩, 林锦峰
- 264 顶空气相色谱法测定糕点中双乙酸钠和丙酸盐的含量
林晶
- 266 纳氏试剂光度法测定氨氮的几点改进
施玲丽, 葛超超, 余晨光
- 269 AES-7200型地质样品专用发射光谱仪测定化探样品中微量银、锡
王顺祥, 马建学, 洪雪冰, 等
- 271 聚乙烯树脂中灼烧残渣测量不确定度的评定
王彬, 邵宇政, 谢中颖, 等
- 272 火焰原子吸收法测定水中的总铬时金属离子干扰的影响分析
仇星泉, 吴晓燕
- 273 氟硅酸中氟、氯、硫酸根、磷酸根的测定
肖清燕, 杜建侠, 毛端平, 等
- 274 KSCN分光光度法测定 Fe^{3+} 条件研究
张金, 郭亚萍

◆ 教学教改

- 276 浅谈阳极、阴极等概念
黄思玉, 蒙冕武, 覃英凤
- 277 化工仪表及自动化课程和相关实验国际化教学改革探索
范江洋, 黄群武, 胡彤宇, 等
- 279 HSCChemistry在电动势法测定化学热力学函数中的应用
魏君, 邓强, 刘雪梅, 等
- 281 专业核心课程《精细化工工艺学》的建设与思考
赵宙兴
- 282 民族师范化学专业《化工基础》教学改革与实践
王广乐, 李海朝, 祝永强, 等
- 284 环境科学专业精英人才胜任力模型构建及其应用
王宇琪, 彭方玥, 骆雪晴, 等
- 286 环境学概论课程教学改革探索与实践
齐云, 杨永奎
- 287 浅谈计算机类人才培养的“产学”融合教育模式
刘晓敏, 张艳丽, 李晶
- 288 高校实验技术队伍定编办法的探讨
张成明
- 290 应用型人才培养视角下的对分教学
王振卫, 万传云
- 291 仪器分析学科教学改革探索
沈洁, 商少明, 李娟
- 292 基于OBE理念为导向的《水污染控制工程》实验考核指标体系的构建和探讨
陈雪松, 郝飞麟, 梅瑜
- 295 以工程素质培养为导向的《发酵工程》课程教学改革与实践
崔培梧, 徐德宏, 谭朝阳, 等
- 297 新形势下民族院校研究生思想政治工作实效性研究
包玲, 张泽会
- 299 地方高校生物工程专业“三层次四结合”实践教学体系的构建与实施
胡位荣, 刘顺枝, 江学斌, 等
- 303 突破传统模式, 实施多元协同探索“教学研做”专业硕士研究生培养目标及模块化课程体系
朱大胜, 张杰, 李果, 等
- 305 病虫害标本在《园林植物保护》教学实践中的应用
蓝木香
- 307 科研反哺教学用于创新人才培养的应用研究与实践
张芊, 李芳, 韩得满, 等
- 309 基于PBL的制药工程综合实验教学模式研究
宗智慧, 潘晴晴, 沈婧祎, 等
- 310 《化工制图》模块化构建与实践探讨
孙虹, 管航敏, 司靖宇, 等
- 312 食品药品类专业物理化学课程教学探索
薛丽平, 朱梅, 鞠丰阳
- 313 环境工程专业就业情况分析及其对应用型人才培养的启示
谢春生, 胥家桢, 梁建华, 等
- 315 关于双语教学的调查与研究——以《无机化学实验》为例
黄宏升, 杨正权, 洪端孝, 曹红梅
- 316 现代化化学实验室的安全管理探讨
曹红梅
- 318 基于“项目+模块”为载体的课程体系探革——以《光谱分析》课程整体设计为例
周言凤, 陈志勋

◆ 其它

《广东化工》投稿须知(前插一)

广告索引:

封一、佛山华联有机硅有限公司; 封二、《广东化工》编委专家名单
封三、广东省石油化工研究院; 封四、浙江东瓯过滤机制造有限公司

本刊已许可中国学术期刊(光盘版)电子杂志社在中国知网及其系列数据库产品中以数字化方式复制、汇编、发行、信息网络传播本刊全文。作者向本刊提交文章发表的行为即视为同意我社上述声明。

本期基金项目论文(共50篇)

- P1 滤筒长度对滤筒除尘器内流场的影响数值模拟研究
- P6 氮对钨配合物的电子结构及相关性质的影响
- P9 新型页岩气田压裂用低密度支撑剂的研制
- P13 基于香豆素衍生物的铕离子荧光探针作用机理的理论研究
- P15 W-Cu-Zr三元系相图900℃等温截面的测定
- P22 热活化过硫酸盐氧化去除木质素降解产物混合物
- P30 阿司匹林高效合成实验及控制条件研究——以碱作为催化剂
- P39 铝离子快速简便的共振散射光谱分析
- P41 铁酸镁催化降解废弃塑料的初步研究
- P44 负载铁催化剂制备及催化蓖麻油裂解
- P48 秸秆液化的工艺研究
- P51 铂/二氧化锡/石墨烯复合催化剂的制备及其催化甲醇氧化性能
- P53 响应面法优化五桠果叶木姜子挥发油的提取工艺研究
- P55 瓜蒌木抗肿瘤活性研究
- P57 矩形多槽道热管传热性能的实验研究
- P73 酶联免疫法对食用油中黄曲霉毒素B1的检测
- P75 灵芝孢子蜂胶质量标准研究
- P77 PFS-PDM复合混凝剂对东江水源水净化处理及其混凝性能研究
- P88 一种可回用瓜尔胶压裂液体系的研究
- P111 不同产地黄芪中有机氯类农药残留量的比较研究
- P113 正交试验法优化超声辅助提取茶叶中的茶多酚
- P119 针对去势抵抗性前列腺癌新型药物的研究进展
- P124 基于双硫键自修复高分子材料研究进展
- P140 硫酸钙晶须制备及应用综述
- P155 水中多溴联苯醚分析技术研究进展
- P161 水华蓝藻控制技术现状及研究进展
- P222 热脱附技术在化工场地六六六污染土壤中的工程应用研究
- P260 利用离子色谱法测定水中碘化物的不确定度
- P262 陈皮中重金属及有害元素检测
- P274 KSCN分光光度法测定 Fe^{3+} 条件研究
- P279 HSCChemistry在电动势法测定化学热力学函数中的应用
- P281 专业核心课程《精细化工工艺学》的建设与思考
- P282 民族师范化学专业《化工基础》教学改革与实践
- P284 环境科学专业精英人才胜任力模型构建及其应用
- P286 环境学概论课程教学改革探索与实践
- P287 浅谈计算机类人才培养的“产学”融合教育模式
- P291 仪器分析学科教学改革探索
- P292 基于OBE理念为导向的《水污染控制工程》实验考核指标体系的构建和探讨
- P295 以工程素质培养为导向的《发酵工程》课程教学改革与实践
- P297 新形势下民族院校研究生思想政治工作实效性研究
- P299 地方高校生物工程专业“三层次四结合”实践教学体系的构建与实施
- P303 突破传统模式, 实施多元协同探索“教学研做”专业硕士研究生培养目标及模块化课程体系
- P305 病虫害标本在《园林植物保护》教学实践中的应用
- P307 科研反哺教学用于创新人才培养的应用研究与实践
- P309 基于PBL的制药工程综合实验教学模式研究
- P310 《化工制图》模块化构建与实践探讨
- P312 食品药品类专业物理化学课程教学探索
- P313 环境工程专业就业情况分析及其对应用型人才培养的启示
- P315 关于双语教学的调查与研究——以《无机化学实验》为例
- P318 基于“项目+模块”为载体的课程体系探革——以《光谱分析》课程整体设计为例

Contents

◆ Experiment & research

- 1 Numerical Simulation of the Effect of Cartridge Length on the Flow Field in Cartridge Filter Yu Huan, Yu Ruilian, Cai Weilong, Hu Gongren
4 The Preparation of 4-(piperidin-3-yl)aniline and Its Tartrate Ban Hao, Xue Xiaowen
6 Influences of N Atom on Electronic Structure and Relative Property of Ruthenium Complexes Wang Juping, Xie Canle
9 Exploration of Making High-strength Low-density Proppant for Shale Fracturing Yan Siming, Yang Shen, Shi Suqing, Han Jinjing, Tang Jun
12 Synthesis of a Caspase inhibitor Ericasan Cheng Wei, Wang Xun, Chen Guohua
13 Theoretical Study of the Sensing Mechanism of Zn²⁺ by Coumarin Derivative-based Fluorescent Probes Liu Qingyu, Chen Junxian
15 900 °C Isothermal Section of W-Cu-Zr Ternary System Gong Jieming, Yu Jinyao, Zhou Zhe, Wang Yuan, Yi Maozhong
18 Content Determination and Extraction Process of Water-soluble Component in Brucea Javanica Xie Jiating, Wu Yanhong, Yang Fan, Liang Quanhui, Li Yuanxin
20 Synthesis and Design of Lesinurad Analogues Tian Senqun, Chen Guohua, Qi Zhiyuan, Meng Haiyan, Hu Kongquan
22 Oxidation Removal of Lignin-degradation Products' Mixture by Heat-activated Persulfate Zhang Chen, Shi Linli, Zhu Junjun, Rong Yayun, Xu Yong, Yong Qiang, Yu Shiyuan
25 Research on Modification of PBS/TPS Blends by Organic Acid Yin Yue, Cao Youming
27 Study on the Performance of Modified Oil Camellia Shell for Adsorbing Perfluorooctane Sulfonate Rao Zhenzhong
30 Study on the High Efficient Synthesis and Control of Aspirin—Alkali as Catalyst Li Tingting, Cai Xiaohua, Fu Renjun
32 Expanded Graphite Microwave Influence Factors Analysis Liu Rongrong, Mao Jinfeng, Hou Pumin
34 Research of Hairy Roots Induced Horsebean by Agrobacterium Rhizogenes Chen Chen
36 Preliminary Study on Rapid Evaluation of Thermal Oxygen Stabilizers for Nylon by Torque Rheometer Qian Zhijun, Wu Guofeng, Yang Bo, Luo Zhongfu, Nie Xin
39 Rapid and Simple Determination of Aluminum Ion in Water by Resonance Scattering Analysis Liao Xianju, Peng Tingting, Li Minying, Han Mengran, Qin Fengying, Meng Xian, Zhou Haiming, Xu Lilin
41 Preparation Parameters Optimizing of Manganese Zinc Ferrite and Its Preliminary Study on Catalytic Degradation of Waste PET Chen Jing, Gu Yun, Zhang Dashun, Hu Jinmin, Tian Xiameng, Huang Jiming
43 The Study on Decolorization of Acid Scarlet Dye Wastewater by Fly Ash He Jiang, Zhou Xumin, Zeng Huimin, Wang Xuliang, Yang Miantao, Chen Zhiyun, Wang Yanxia, Zhang Fengru
44 Load Iron Catalyst Preparation and Catalytic Castor Oil Cracking Zhu Huiqin, Zhang Xiaoli, Wang Yanxiong
48 Study on Liquefaction Process of Straw Zhan Genquan, Liu Yilu, Xu Xiaoli, Huang Yinchun, Huang Wenshun
51 Synthesis of Pt/SnO₂/Graphene Composite Catalyst and Its Electro-catalytic Properties to Methanol Oxidation Luo Baomin, Li Fenfen, Jiang Tingting, Hu Mengliang
53 Optimization of Extraction Technique of Litsea dilleniifolia P.Y.Paict p. h. Huang Volatile oil by Response Surface Method Xu Danni, Guo Yangyang
55 The Antitumor Activity of Fissistigma oldhamii(Hems1.) Merr. Zeng Li, Xxiang Rong, Fu Chunyan
57 Experimental Study on Heat Transfer Performance of Rectangle Multi-Grooves Structure Heat Pipe Wang Wenhao, Yin Huibin, Zhuang Zhanxin
60 Formulation Optimization and in Vitro Release of Ferulic Acid Liposomes Zhao Yuxi, Mei Xue, Chen Zhen, Yang Qin, Wei Ying
62 The Studies on Enzyme-linked Immune Detection of Paracetamol in Herbal Tea Liu Hui, Xiong Bo, Chen Lei, Han Zhenya
64 Evaluation of Moisture Test of Triglyceride for Cigarette Production Cheng Shaofeng, Lin Baomin
65 Comparative Study on Pretreatment Methods for Chlorine and Fluorine Determination of Fuels Inbiomass Power Plant Chen Wei, Zhang Hongliang, Bi Wulin
68 Development of Translucent White Polyester Film and Study on the Property Xie Yong, Kang Jihong, Feng Liming
70 Water Quality Assessment of a Source Water Monitoring Point in Guangdong Province by Principle Component Analysis Feng Qilan, He Zhanduan, Zhou Qiting
73 Detection of Aflatoxin B1 in Edible Oil by Enzyme-linked Immunosorbent Assay Li Jiang, Qi Yan, She Zhiyun, Liao Guifu, Chen Manyang
75 Quality Standard of Ganoderma lucidum Spore Propolis Ou Guishan, Tang Jianxin, Su Zhangxuan, Xu Wanbang, Liang Shengwang
77 Study on Purification Treatment of Dongjiang River Resource Water with the Composite Coagulant of PFS-PDM and its Coagulative Performance Mo Jianwen
80 Effect of Plasma Treatment on the Properties of PVC Edge Banding Xie Zhikuo
82 Study on Preparation and Properties of Reactive Polyurethane Adhesive for Electronic Industry Tian Junling, Lei Zhouqiao
84 Brief Analysis on the Energy Saving Effect of Water Pump Spray Coating with High Polymer Coating Chen Kunjie
86 Study on the Removal of Chromium from Ferric Chloride Etching Waste Liquor Yu Defu, Wu Yongji, Liang Yuwei, Lan Licai, Li Chuxi, Wang Quanyong
88 The Research on a Kind of Reuse Guar Gum Fracturing Fluid System Wang Xuan
92 Extraction of Calcium Phytate Yang Chunfa, Fang Zehua, Liu Qinghui, He Shiling, Cai Shuichuan
94 The Synthesis and Characterization of Octavinyl Polyhedral Oligomeric Silsesquioxane (OvPOSS) and Study for Grafting Fluorinated Poly (styrene-acrylate) Fan Liping
96 Study on Modification of Phosphogypsum as Cement Retarder and Its Performance Yue Qin
99 The Study on the Synthesis Method of 1-(2-Chloroethoxy) Propane Chen Pengpeng, Jiang Huihua, Zhou Xiaojun, Zhang Fengliang
100 Technical and Economic Research and Application of GE Coal Water Slurry Gasification Process about Coal Blending Fu Guo
102 Study on Adsorption Capacity of Radionuclide Cs⁺ in Bentonite-Sand Mixture Wang Long, Lu Chao, Kuang Wang
104 Research Application of Temporary Plugging and Acidization Li Jianxiong
106 Optimization of Tea Aaponin Extraction Process Zhang Jianwen, Wang Jinfeng, Luo Guochao, Ye Jin, Ye Zhenxing
108 The Effect of Light Dynamic Penetration Rod Inclination to Deviate From the Results Li Jianying, Huang Wenguang
109 Synthesis of Modified Phthanlic Polyester Polyol and Its Application in Rigid Polyurethane Foam Lin Li
111 Comparative Study on Organochlorine Pesticide Residues in Astragalus Membranaceus from Different Habitats Wu Fei, Huang Li, Li Yuexia, Luo Yun, Jin Chuanshan
113 Simultaneous Determination of 8 Heavy Metals in Pond Sediment by Microwave Digestion -ICP-MS Xie Cailing, Xiong Wenming, Huang Yong, Zhao Huanzhao
115 Synthesis and Characterization of Cu (II) Complexes Of Schiff-Base Derived from D-Glucosamine Condensed With 2-Furaldehyde Zhang Xiao
118 Study on Removing Impurities from Silver Nitrate for Battery He Xinchun

◆ Summarize

- 119 Recent Progress in New Drugs Targeting Castration Resistant Prostate Cancer Xu Xi, Bian Jinlei, Li Zhiyu
122 Study and Application of the Moving Bed Biofilm Reactor Song Haoliang
124 Research Progress of Self-healing Polymer Materials with Thiol-disulfide Exchange Xu Xingwang, Shen Wei, Liu Jiali, Wang Junyi, Li Shen, Zhou Xing
127 The Molecular Mechanism of Fibrosis and the Progress of Treatment Song Zhiqiang, He Yuchen, Xue Xiaowen
131 Advances in Adsorption of Heavy Metals by Magnetic Graphene Materials Yu Qisu
133 Study on Treatment of Wastewater from Livestock and Poultry Farm Hu Jiejun, Tan Leilei
135 Research Advance of Alkoxide Amide Derivative Surfactants Zhang Yibo
137 Progress in Extraction and Pretreatment Techniques Based on Magnetic Ionic Liquids Du Yingxiang, Chen Jiahui
140 Review of the Preparation and Application of Calcium Sulfate Whisker Zhen Deshuai, Liang Shuang, Zhang Xingwen, Tu Xianting, Shi Chengji
142 The Review of Microalgae Energy Regeneration and Utilize Technology Progress Zhu Yingying
145 Patent Analysis of Sumitomo Seika Chemicals about the Acrylic Acid Super Absorbent Polymer Wang Huanfang, Zhou Yong
147 Analysis of Red Gypsum Production in Sulfuric Acid Titanium Dioxide Production Process Deng Gang
150 Research and Development of Coolants Used in Wind Power Generation Cooling Device Dai Jie, Wu Jianchao, Liu Jianwei, Chen Xusheng
152 The Application of the Failure Mode and Effects Analysis in Petrochemical Industry Li Xinghua
155 Progress of Analytic Method Polybrominated Diphenyl Ethers(PBDEs) Compounds in Water Xu Xiaoqing
157 Patent Technology of PVDF Dielectric Material Zhou Yong, Wang Huanfang
159 A Use of the ICS - 900 Ion Chromatograph and the Common Obstacles Tan Jianfeng
161 Present Situation and Research Progress of Cyanobacteria Bloom Control Technology Xu Xiangen, Cao Huimin, Lu Sensen, Gu Liming
163 Thinking about the Supply Side Reform of Thermosetting Resins Wang Wenqing
165 Study on Patent Technology of Supercritical CO₂ Fluid Dyeing Guo Kaiyin, Zhang Chao, Wei Qiang, Wei Di
167 Solid-phase Microextraction Application in Sample Preparation Techniques Wu Lili, Deng Haitao, Xu Guo, Gu Jian, Ma Yufeng, Huang Jianfeng
169 Discussion on the Standard of Hose for Medical Packaging Material Wang Yiye, Yang Fangfang, Liu Shunli
170 Analysis of Patent Applications in the Domestic on the Development of the Fur Dyeing Process Song Henghuan, Guo Kaiyin, Wei Qiang, Wei Di
172 Applications of Ion Exchange Compact Bed in the Pure Water System Zhang Xiaoping, Wen Quan, Xu Bin
175 The Quality Control Measures of Site Mixed Emulsion Explosive Liu Xiaowen, Li Jianbin, Gong Bing, Zhang Huiyu
177 Analysis of the Synthesis Method about Pimavanserin Zhang Yanqiao, Cheng Yuhong, Wei Jilong, Deng Rui, Liu Ningning
178 Holiday Effect on Safety Work of Chlorination Workers in Waterworks Wang Meiyun

- 179 Patents Development Status of Non Halogen Flame Retardant Technology in Wood Materials Li Yuman, Long Ying
 180 Development Present of Pb-Zn Industry Situation in Henan Province Guo Chunxia, Liu Dejie, Xie Jing, Yang Limin, Deng Ruihong, Niu Deyi, Zhang Heng
 184 Analyzing Liquid Ammonia and Carbamide Used for Denitration by Coal-fired Power Plants from the Perspective of Risk Management Ye Xiaojing
 185 Ion Exchange Membrane Separation Technology and Its Application Huang Wenguang, Li Jianying
 186 Fine Filter Application Analysis in Fine Treatment of oily water on Offshore Oilfield Gao Xiaolei
 188 Problems and Countermeasures of Dangerous Chemicals in Guangzhou Development Zone Zeng Xiangchun
 189 Analysis of Patent of Flame-Retardant Polycarbonate Xie Song, Liu Xuewu
 191 Review of Silver-zinc Secondary Batteries Ni Wenhao, Song Honglei, Xiao Anping
 193 Injection Technology of Special Engineering Plastics Polyphenylene Sulfide Wu Jianwen, Wu Qinghe
 195 Description of p-Hydroxyphenylglycine on the Preparation and Chiral Analysis Method of Enantiomer Yang Lanfen, Dong Yi
 199 Application of Poly (Ionic Liquid)s in the Separation of Natural Products Wang Chunyan

◆ Environmental protection

- 201 The Construction of Environmental Precision Monitoring and Management Platform based on Large Data Ge Yanhong, Li Yujin
 204 Key Points of Environmental Impact Assessment of Power Transmission Project Wu Wenguang, Liu Han, Li Lingling
 206 Engineering Practice on the Treatment and Reuse of Toilet Paper Waste-water Deeply Treated by Ozone/Denitrification Deep Bed Filter Zhu Jie, Huang Duanlin, Han Yuying, Yu Jiaqi
 207 Thermal Drying of Sewage Sludge Project Environmental Impact Analysis He Zhifeng, Liang Huajie, Yuan Bowei, Niu Tao, Cui Xiaobin, An Pignlin, Wang Guangping
 209 A Study on the Environmental Meteorological Similarity between Yunfu and Its Surrounding Area Fan Xu
 212 Hazards and Control of Cyanobacteria Ying Jiawei, Zhang Jing, Zhang Li'na
 214 Study on Pollution Control Technology of Drinking Water Source in Typical Small Township You Zhenglou
 216 Discussion on the Protection Zone of Construction Project Environmental Management Liu Yao
 218 Study on High Concentration Wastewater Produced during the Shut-down Maintenance of a Refinery Chen Haoyun, Xiong Bihua
 220 Study on the Legal Responsibility of Environmental Emergency Management in Enterprises and Institutions Ke Zhaoyue, Han Jiao
 222 Engineering Application of Thermal Desorption for Hexachlorocyclohexane-contaminated Soil in Chemical plant Site Zheng Guilin, Xie Tian, Xue Tianli, Jiang Linling, Li Qiujun
 224 The Applied Research on the Combined Process Using Pre-Ozonation And Biological Aerated Filter for the advanced treatment of Landfill Leachate Guo Wei
 226 Analysis in Status and Problems of Urban Wastewater Treatment Yang Saifeng, Li Jianzhong, Deng Yutao
 228 Optimized & Designed on Composite Treatment Process to Crystallized Mother Liquid of BCC Hu Chunlin, Wang Chunxia, He Deqiang
 230 A Project Example and Conclusion of Soil Heavy Metal Contamination Remediation in Guangdong Xue Jiale
 232 Research on Submerged Plants Building in City Rivers Zhang Junrong
 234 Analysis of the Odor Polluted Emission of Pig Farm in Jiangmen and Its Controlling Measures Chen Jianhong, Chen Shupeil, Wu Qiaoxu
 235 Current Situation Research of Guangdong Province Environmental Emergency Management Sun Beili
 237 Engineering Example of Treatment Process for the Wastewater of Knitted Apparel Production Gan Shiwei

◆ Design & equipment

- 238 Vibration Analysis and Vibration Eliminating Retrofit Research for Reciprocating Compressor Delivery Piping Xu Airong, Zhang Li
 240 Application of Advanced Control in Catalytic Cracking Unit He Yi, Wang Tongxun
 244 Problems and Treatment of 2# FCC Flue Gas Turbine after Put into Operation Zhou Xuefeng
 247 Cause Analysis and Preventive Measures of Steam Boiler Explosion Accident Li Dezhong
 250 Selection of Driving Mode for Compressor Wang Chenggang
 251 Design of Vessel with Half-pipe Jacket Liu Wei
 252 The Design of Online Monitoring System for Cooking Oil Fume Zhou Zhiqian, Xu Huanhuan, Wang Lei, Wang Xiaoxing
 254 Discussion on the Importance of the Establishment of CNG Gas Cylinder Inspection Database for the Inspection and Service Life of CNG Gas Cylinders Zhou Yu
 256 Acid Corrosion Problems in the Operation of the Alkylation Unit Analysis and Preventive Measures Zhang Bin

◆ Analysis testing

- 258 Cold Vapor Atomic Absorption Measure Mercury Method Would be Adopted to Measure Hg in Myrtle Fruit sSampled by Microwave Digestion Tang Canming, Shi Yanli, Dou Wenyan, He Wenjing
 260 Evaluation of Uncertainty for the Measurement of Iodide in Water Based on Ion Chromatography Su Yan, Feng Liangji
 262 The Determination of Heavy Metal Elements and Harmful Elements in Dried Tangerine Peel by ICP-MS Xu Wanbang, Su Zhangxuan, Lin Jinfeng
 264 Determination of Sodium Diacetate and Propionate in Pastry by Headspace-Gas Chromatography Lin Jing
 266 Improvements in Determination of Ammonia Nitrogen through Nessler's Reagent Photometry Shi Lingli, Ge Chaochao, Yu Chenguang
 269 Determination of Trace Silver and Tin in Geochemical Samples by AES-7200 Emission Spectrometer Wang Shunxiang, Ma Jianxue, Hong Xuebing, Wang Pei
 271 Evaluation of Uncertainty in Measurement of Ignition Residue in Polyethylene Resin Wang Bin, Shao Yuzheng, Xie Zhongying, Li Zheng
 272 Analyzation of Metal Ion Interference in Determination of Total Chromium in Water by Flame Atomic Absorption Spectrometry Qiu Xinquan, Wu Xiaoyan
 273 Determination of Fluorine, Chlorine, Sulfate and Phosphate in Fluorosilicic Acid Xiao Qingyan, Du Jianxia, Mao Duanping, Rong Shasha
 274 Study on the Determination of Fe²⁺ by Potassium Thiocyanate Spectrophotometry Zhang Jin, Guo Yaping

◆ Teaching reform

- 276 Preliminary Discussion about Anode and Cathode in Chemistry Huang Siyu, Meng Mianwu, Qin Yingfeng
 277 Teaching Reformation of Internationalization Oriented Chemical Instrument and Automation with Related Experiments Fan Jiangyang, Huang Qunwu, Hu Tongyu, Guo Cuili
 279 Application of HSC Chemistry Software in the Determination of Chemical Thermodynamic Function by Measuring Electromotance Wei Jun, Deng Qiang, Liu Xuemei, Gu Xuefan, Wang Wenzhen
 281 Construction and Thoughts of Major Core Course of Fine Chemical Technology Zhao Zhouting
 282 Teaching Reform and Practice on Chemical Engineering Foundation of National Normal Chemistry Wang Guangle, Li Haichao, Zhu Yongqiang, Xu Guiyu
 284 Professional Elite Talent Competency Model and Its Applications of Environmental Science Wang Yuqi, Peng Fangyue, Luo Xueqing, Li Yongfeng
 286 Teaching Reform and Practice of Introduction to Environment Science Qi Yun, Yang Yongkui
 287 Talk about "Production and Learning" Confluent Education Model for the Computer Personnel Training Liu Xiaomin, Zhang Yanli, Li Jing
 288 Discussion on the Method for Evaluating Technical Team Regimentation in University Laboratory Zhang Chengming
 290 PAD Teaching from the Perspective of Cultivating Applied Talents Wang Zhenwei, Wan Chuanyun
 291 Exploration of Educational Reforms for Instrumental Analysis Shen Jie, Shang Shaoming, Li Juan
 292 Establishment and Discussion of OBE the Assessing Index System Based on Experimental Capability of Water Pollution Control Engineering Chen Xuesong, Hao Feilin, Mei Yu
 295 Engineering Capability Training Oriented Educational Reform and Practice of Fermentation Engineering Curriculum Cui Peiwu, Xu Dehong, Tan Zhaoyang, Peng Fei, Meng Lei
 297 Study the Actual Effect of the Ideological and Political Education of the Postgraduates under the New Situation Bao Ling, Zhang Zheui
 299 Construction and Practice of the Practical teaching System for Bioengineering Major in Local University Based on the Three Levels and Four Combinations Model Hu Weirong, Liu Shunzhi, Jiang Xuebin, Ke Desen, Lei Dezhu, Gui Lin, Tian Chang'en
 303 Study on "Teaching, Learning, Research and Practice" Training Objectives and Modular Curriculum System of Professional Graduate Student by Changing Its Traditional Model and Implementing Its Multiple Collaboration Zhu Dasheng, Zhang Jie, Li Guo, Liu Youying
 305 Application to the Teaching Practice of Specimens of Plant Diseases and Insect Pests on Garden Plant Protection Lan Muxiang
 307 Applied Research and Practice of Scientific Research of Back Feeding Teaching for Innovative Personnel Cultivating Zhang Qian, Li Fang, Han Deman, Jia Wenping
 309 A PBL teaching mode of Pharmaceutical Engineering Synthetic Experiment Zong Zhihui, Pan Qingqing, Shen Jingyi, Yuan Ming, Xue Hongbao
 310 Chemical Engineering Drawing Modular Construction and Practice Sun Hong, Guan Hangmin, Si Jingyu, Gao Daming, Hu Kunhong, Zhu Dechun, Hu Enzhu
 312 Teaching Exploration of Physical Chemistry Course in Food and Pharmacy Specialty Xue Liping, Zhu Mei, Ju Fengyang
 313 Analysis on the Employment Situation of Environmental Engineering and the Revelation of Applied Technical Personnel Training Xie Chunsheng, Xu Jiazhen, Liang Jianhua, Lin Weirui, Wu Xiang
 315 An Survey and Research on Bilingual Teaching—a Case Study of "Inorganic Chemistry Experiment" Huang Hongsheng, Yang Zhengquan, Hong Duanxiao
 316 Modern Chemical Laboratory Safety Management Cao Hongmei
 318 Exploration and Reform of the Curriculum System as the Carrier of "Project+Module" — an Example of the Overall Design of the Spectral Analysis Course Zhou Yanfeng, Chen Zhixun

Sponsor and Publisher: Guangdong Province Chemicals Institute
Editor: The Editorial Office of "Guangdong Chemical Industry"

Address: The Editorial Office of "Guangdong Chemical Industry", 116 Yuehua Road, Guangzhou, 510030 China
Tel/Fax: 86-20-83336009
E-mail: gdcic200@163.com **http://www.gdchem.com**