

### 管理方略

提升企业人力资源数据分析服务的对策与建议	祝颖	1
浅议对大型LNG接收站工程档案有效管控	李钊澎, 刘立平, 张克政, 李琴琴, 郝鹏	4
采购施工总承包固定总价合同模式的招投标风险探讨	胡道德	7
基于工作的石化企业劳动定员优化研究	王书欣, 曾少波	11
LNG加气站风险控制与HSE管理研究	潘长满	15
海外石油公司对钻完修井承包商的HSSE管理探讨	杨月明, 魏可可	19

### 企业政工

党建引领矿区物业服务高质量发展的对策	赵洋	23
--------------------	----	----

### 人才培养

医工交叉学科建设与人才培养的挑战与对策	吴颖, 宋继彬, 员荣平	26
基于化工大赛模式下的化工原理教学改革研究	张志, 高雪梅	30
创新驱动下的石化领域人才培育模式的探索与实践	余海康, 吴海波, 黄艳平, 练国峰, 刘欣欣	34
“油田化学”特色的表面活性剂化学课程教学探索	李小江, 暴丹, 周成裕	38
制药专业现代学徒制中高职一体化课程体系的构建与实践	罗春萍, 沈淑敏, 冯娟, 谢庭辉	42
基于工科核心素养形成“植物功能成分提取及应用”教学设计与实践	蔡杰慧, 廖一锦, 张海全	47
物理化学综合实验设计——双金属磷化物的制备及应用	宋琪, 李璟明, 努尔古丽·拉提甫, 明惠, 范士广, 吴梅, 侯军伟	52

### 质量与检测

氧化-还原脱色法对牦牛毛性能的影响	李珊, 孙同明, 费燕娜	57
ICP-MS测定食品接触用铝箔纸中多种有害元素迁移	苏淑坛, 洪嫫, 唐楚夏, 曾梅利, 陈忆霞, 黄嘉庚	61

### 环保与节能

规模化可再生能源电解水制氢技术及其发展趋势	付林	66
“双碳”目标下锅炉节能改造与效率提升技术的研究	王晓东	69
烟气余热回收技术利用与研究	辛海, 杨勇, 闫玉麟, 倪志阳	73

### 技术与信息

基于SpringBoot+MyBatis的地震处理项目管理系统研究	余卫江, 宋志君, 陈雄斌, 林威扬, 孙健	77
连续油管自动控制系统研究与应用	陈新龙, 王贺, 刘文涛, 汝渴, 袁飞, 孙晓明, 赵华	81
探索基于物联网技术的智慧燃气管管理系统	陈青山	85

# 目次

基于COMSOL的氯乙烯储罐区泄漏数值模拟 .....	高进浩, 贲健, 张丽, 文蓬涛, 赵军, 陈飞, 靳玉龙	92
Novolen聚丙烯工艺关键技术研究进展 .....	范姝艾, 韩松涛, 郑煦, 佟小倩, 谢远洋, 张彬, 白天, 钟璐玮	102

## 安全管理

危化品泄漏事故分析与防控方法研究 .....	郝思田	107
化工园区火灾风险动态评估与消防管理创新模式研究 .....	王奇逸	110
化工行业消防安全管理的经验总结与展望 .....	王梓烨	114

## 设备运维

循环流化床锅炉堵渣原因及处置措施 .....	梁新亚, 何娟, 李富涛, 徐娟, 马耀东	118
海洋石油工程电气设备的防漏电技术研究 .....	罗凯东	121
石化企业自备铁路罐车人工清洗风险分析及防治对策 .....	梁国华	124
新型乙烷裂解炉辐射段炉管鼓包、开裂失效原因分析 .....	赵磊, 王明明, 陈永伟, 黄超, 白涛涛	129

## 工艺管控

羧基丁苯胶乳在企业乳液聚合过程中的创新应用研究 .....	刘永涛	134
罐区管道工艺分析及配管技术研究 .....	马博, 侯卫东	137
海外油田工艺安全防控策略的优化研究 .....	魏可可, 杨月明	140
基于包封率测定的翅果油脂质体制备工艺优化研究 .....	李晓青, 王红娟, 达晓璐	143
丁二酸二甲酯的研究方法探讨 .....	张鹏辉, 马国根, 马建志, 杨钰	147
某化工污水厂去除总氮工艺设计及工程运行效果实例 .....	刘青, 何晓锋, 范修波	151

## 工程与施工

海洋工程项目中的隐蔽工程检验 .....	谢伟, 周华亮, 梅华东, 高晓博, 赵国华	155
万207井套管穿漏修复施工工艺 .....	徐成龙, 彭继忠, 万兵, 崔建桥, 雷海	159
马达钻具在疏松砂岩地层中轨迹控制实例及技术措施 .....	齐斌	164

## 彩页说明

- 彩页1——中国石油和化工行业-企业发展指数
- 彩页2——《化工管理》征稿简则简版
- 彩页3——《化工管理》征稿简则详版

## 补白

土壤污染源头防控行动计划发布 促进土壤健康和永续利用(6); 工信部: 到2027年制定出台200项重点工业产品碳足迹核算规则标准(18); 全球首条! 万吨级! 开工! (33); 我国首个国家级陆相页岩油示范区年产突破百万吨(91); 《中国能源转型展望2024》执行摘要在巴库气候大会上发布(101)

# CONTENTS

---

## Management Strategy

Strategies and Suggestions for Improving Enterprise Human Resource Data Analysis Services .....	ZHU Ying	1
Effective Management and Control of Archives for Large-scale LNG Receiving Stations Projects .....	LI Yipeng, LIU Liping, ZHANG Kezheng, LI Qinqin, HAO Peng	4
Exploration of Bidding Risks in the Fixed Total Price Contract Mode of Procurement and Construction General Contracting .....	HU Daode	7
Research on Work-based Labor Quota Optimization in Petrochemical Enterprises .....	WANG Shuxin, ZENG Shaobo	11
Study on Risk Control and HSE Management of LNG Filling Station .....	PAN Changman	15
Discussion on HSSE Management of Drilling and Completion Contractors by Overseas Oil Companies .....	YANG Yueming, WEI Keke	19

## Enterprise Political Work

Strategies for the Party Building Leading High Quality Development of Property Services in Mining Areas .....	ZHAO Yang	23
---	-----------	----

## Personnel Culturing

Problems and Solutions in the Construction of Medical and Engineering Interdisciplinary Disciplines and Personnel Training System .....	WU Ying, SONG Jibin, YUAN Rongping	26
Research on Teaching Reform of Chemical Engineering Principles Based on the Model of Chemical Engineering Competition .....	ZHANG Zhi, GAO Xuemei	30
Exploration and Implementation of Talent Cultivation Model in Petrochemical Industry Driven by Innovation .....	YU Haikang, WU Haibo, HUANG Yanping, LIAN Guofeng, LIU Xinxin	34
Teaching Exploration of Surfactant Chemistry Course with the Characteristics of “Oilfield Chemistry” .....	LI Xiaojiang, BAO Dan, ZHOU Chengyu	38
Construction and Practice of Curriculum System between Secondary and Higher Vocational Education in the Modern Apprenticeship System of Pharmaceutical Majors .....	LUO Chunping, SHEN Shumin, FENG Juan, XIE Tinghui	42
Teaching Design and Practice of “Extraction and Application of Plant Functional Components” Based on the Formation of Key Competencies of Engineering .....	CAI Jiehui, LIAO Yijin, ZHANG Haiquan	47
Comprehensive Experiment Design of Physical Chemistry——Preparation and Application of Bimetal Phosphides .....	SONG Qi, LI Jingming, Nurgul · LATEP, MING Hui, FAN Shiguang, WU Mei, HOU Junwei	52

## Quality and Testing

Effects of Oxidation-reduction Decolorization on the Properties of Yak Hair .....	LI Shan, SUN Tongming, FEI Yanna	57
ICP-MS Determination of Migration of Multiple Harmful Elements in Aluminum Foil for Food Contact .....	SU Shutan, HONG Yuan, TANG Chuxia, ZENG Meili, CHENG Yixia, HUANG Jiageng	61

## Environmental Protection and Energy Saving

Large-scale Water Electrolysis Hydrogen Production Technology Based on Renewable Energy and Its Development Trend .....	FU Lin	66
Research on Boiler Energy Saving Transformation and Efficiency Improvement Technology under the “Dual Carbon” Goals .....	WANG Xiaodong	69
Waste Heat Recovery Technology Permeability Simulation of Formation Fluid .....	XIN Hai, YANG Yong, YAN Yulin, NI Zhiyang	73

# CONTENTS

---

## Technology and Information

Research on Seismic Processing Project Management System Based on SpringBoot+MyBatis .....	YU Weijiang, SONG Zhijun, CHEN Xiongbin, LIN Weiyang, SUN Jian	77
Research and Application of Automatic Control System for Continuous Tubing .....	CHEN Xinlong, WANG He, LIU Wentao, RU Ke, YUAN Fei, SUN Xiaoming, ZHAO Hua	81
Exploring the Intelligent Gas Management System Based on Internet of Things Technology.....	CHEN Qingshan	85
Numerical Simulation of Leakage in Vinyl Chloride Storage Tank Area Based on COMSOL .....	GAO Jinhao, BEN Jian, ZHANG Li, WEN Pengtao, ZHAO Jun, CHEN Fei, JIN Yulong	92
Research Progress on Key Technologies for Producing Polypropylene by Novolen Process .....	FAN Shu'ai, HAN Songtao, ZHENG Xu, TONG Xiaoqian, XIE Yuanyang, ZHANG Bin, BAI Tian, ZHONG Luwei	102

## Safety Management

Analysis of Hazardous Chemical Leakage Accidents and Research on Prevention and Control Methods .....	HAO Sitian	107
Research on Fire Risk Dynamic Assessment and Fire Management Innovation Model in Chemical Parks .....	WANG Qiyi	110
Experience Summary and Prospect of Fire Safety Management in the Chemical Industry .....	WANG Ziyue	114

## Equipment Operation and Maintenance

Reasons and Disposal Measures for Slag Blockage in Circulating Fluidized Bed Boilers .....	LIANG Xinya, HE Juan, LI Futao, XU Juan, MA Yaodong	118
Research on Anti-leakage Technology of Electrical Equipment in Offshore Petroleum Engineering.....	LUO Kaidong	121
Risk Analysis and Prevention Countermeasures for Manual Cleaning of Railway Tanker Owned by Petrochemical Enterprises.....	LIANG Guohua	124
Analysis of the Failure Causes of the Tube Bulge and Cracking in the Radiation Section of the Tew Ethane Cracking Furnace .....	ZHAO Lei, WANG Mingming, CHEN Yongwei, Huang Chao, BAI Taotao	129

## Process Control

Study on Innovative Application of Carboxylated Styrene Butadiene Latex in Enterprise Lotion Polymerization Process .....	LIU Yongtao	134
Process Analysis and Piping Technology Research of Tank Area Pipelines .....	MA Bo, HOU Weidong	137
Research on Overseas Oilfield Technological Safety Prevention and Control Strategies.....	WEI Keke, YANG Yueming	140
Optimization of Preparation Technology of Elaeagnus Mollis Oil Liposomes Based on Entrapment Efficiency Determination .....	LI Xiaoqing, WANG Hongjuan, DA Xiaolu	143
Exploration of Research Methods for Dimethyl Succinate .....	ZHANG Penghui, MA Guogen, MA Jianzhi, YANG Zheng	147
Design and Engineering Operation of Total Nitrogen Removal Process in A Chemical Wastewater Treatment Plant .....	LIU Qing, HE Xiaofeng, FAN Xiubo	151

## Engineering and Construction

Inspection of Hidden Work for Off-shore Project .....	XIE Wei, ZHOU Hualiang, MEI Huadong, GAO Xiaobo, ZHAO Guohua	155
Construction Technology of Casing Leakage Repair in Wan 207 Well .....	XU Chenglong, PENG Jizhong, WAN Bing, CUI Jianqiao, LEI Hai	159
Case of Trajectory Control with PDM in Loose Sandstone Formation and Technical Measures .....	QI Bin	164