

工业水处理

GONGYE SHUICHULI

(月刊)

1981 年创刊

2019 年第 2 期 (总第 336 期)

Vol. 39 No.2

主 编: 滕厚升

执行主编: 刘艳飞

副 主 编: 李绍全 明云峰

主管: 中海油天津化工研究设计院有限公司

主办: 中海油天津化工研究设计院有限公司

编辑:《工业水处理》编辑部

出版:《工业水处理》编辑部

地址: (300131) 天津市红桥区丁字沽三号路 85 号

编辑部电话: (022) 26689330

广告部电话: (022) 26689033 26678212

E-mail: iwt@iwt.cn

网址: www.iwt.cn

微信公众号: iwt1981

印刷: 天津市云海科贸开发公司

责任编辑: 侯金萍



扫一扫

关注《工业水处理》公众号

国内总发行: 天津市邮政报刊发行局

国外总发行: 中国国际图书贸易总公司

中国标准连续出版物号: ISSN 1005-829X

国内统一连续出版物号: CN 12-1087/X

国内订阅: 全国各地邮局(所)

邮发代号: 国内 6-61 国外 4515MO

发行范围: 公开发行

商标注册号: 728782

出版日期: 2019-02-20

定 价: 国内 30.00(元)

国外 16.00(\$)

本刊入选

- 全国中文核心期刊
- 中国期刊方阵双效期刊
- 中国科技论文统计源期刊(核心期刊)
- 中国科学引文数据库
- 美国化学文摘
- 俄罗斯《文摘杂志》
- 美国剑桥科学文摘
- 日本科学技术振兴机构数据库

目 次

专论与综述

厌氧氨氧化与反硝化除磷耦合机制

..... 陈亚印 魏吴鹏等 (1)

膜法水处理中膜污染的化学控制研究进展

..... 周超 吴东海 陆光华等 (6)

PPCPs 在环境介质中的归趋及高级氧化降解研究进展

..... 王永强 张玲丽 杨传玺等 (11)

电化学水垢去除技术处理能力核算及技术改进

..... 徐浩 雷佳妮 杨鸿辉等 (17)

试验研究

超分子缓蚀剂对凝结水中铁含量的抑制机理

..... 樊保民 吕金玉 杨彪等 (21)

分子印迹 TiO₂ 光催化降解水杨酸有机废水研究

..... 吴鹏飞 朱雷 汪恂等 (26)

g-C₃N₄/TiO₂ 复合光催化剂的制备及其可见光催化性能

..... 刘宏伟 任学昌 万建新等 (30)

污泥龄对 HMBR 中 S-EPS 及膜污染的影响

..... 刘强 梁森 闫军伟等 (34)

电渗析技术在树脂脱附液资源化中的应用

..... 曹勋 丁新春 陈利芳等 (38)

高级氧化工艺处理阻燃布生产洗布废水的研究

..... 段文杰 田振邦 赵可江等 (42)

电化学氧化去除水中的磺胺二甲基嘧啶研究

..... 蓝梅 孙凤坤 张会宁等 (46)

TiO₂-GR/MgO 的制备及降解刚果红性能研究

..... 饶砚迪 盛义平 周城等 (50)

马来酰胺酸类单体的合成及聚合后阻垢性能的研究

..... 范雅珺 梁兵 (54)

低温低浊进水条件下壳聚糖助滤效果研究

..... 王珊 张克峰 任杰 (58)

壳聚糖改性活性炭纤维毡处理含铜废水的研究	王萌 罗运柏 于萍(62)
ASBR-SBR-ASBR 工艺处理含氮有机废水的快速启动	赵瑛 端允 杨晶晶等(66)
振动膜和碟管膜联合处理高浓度废乳化液	冯凡让 郑帅飞 胡元娟等(70)
MBR 工艺对煤制油废水污染物去除效果研究	王宝莲 杨帆(75)
锅炉水汽中有机物高温分解和腐蚀特性研究	金绪良 曹蕃 郭婷婷(78)
离子交换树脂的电再生机理研究	金欣荻 李天均 颜亦磊等(81)

油气田水处理

海上纳滤水处理技术研究与应用	宋吉锋 谢思宇 郑华安等(86)
----------------	------------------

分析与监测

涠洲油田回注生产水主要水质指标检测方法改进	王闻 郑华安 李彦闻等(89)
-----------------------	-----------------

工程实例

港陆钢铁公司焦化废水生化处理系统改造工程	岳丽芳 周红星 张连成(92)
煤化工高含盐废水资源化处理技术的工程应用研究	任同伟 俞彬 阳春芳等(96)
微电解-UASB-MBBR 处理中药提取废水研究与应用	王宗华 赵东升(99)

经验交流

工程实例中影响 SDI 测试结果的因素分析	赵珺(103)
一种小直径汽包锅炉的蒸汽品质协调处理方法	张雨婷 冯向东(106)

水处理知识讲座 (5,49)

会议征文 (25)

简讯 (108)

广告目次 (J1)

工业水处理

GONGYE SHUICHULI

(月刊)

《工业水处理》创刊于 1981 年,是由中海油天津化工研究设计院有限公司主办、国家工业水处理工程技术研究中心协办的专业性科技期刊。重点报道国内外有关工业废水、循环冷却水、锅炉水、工艺用水的水处理技术动态、专题述评、研究报告、工程案例、经验总结、科学管理及行业快讯等内容,适于从事水处理领域的高等院校师生、科研设计单位的工程技术人员及企业的运营管理人员订阅。

下期要目

- 活性溴杀菌剂的研究进展
- 屠宰及肉类加工废水处理现状及研究进展
- 水中药品的污染现状及高级氧化处理
- 响应面法优化光电-Fenton 氧化处理印染废水
- 热解法合成增强光催化活性的 $In_2O_3-TiO_2$ 纳米管
- 水滑石基固体双氧水处理水体中金属络合染料研究
- 油、水井酸化作业返排液处理技术
- 基于微控技术的原位水质总磷在线监测系统研究
- 物化预处理-CASS 工艺处理农药中间体废水工程实例
- 1 000 MW 超超临界机组给水弱氧化处理技术及应用

Industrial Water Treatment(Monthly)

Established in 1981

Vol.39 ,No.2,2019

(Serial No.336)

Chief Editor: Teng Houkai

Executive Editor in Chief: Liu Yanfei

Vice Chief Editor: Li Shaoquan Ming Yunfeng

Sponsored by

CenerTech Tianjin Chemical Research and Design Institute Co.,Ltd.

Edited by

The Editorial Office of Industrial Water Treatment

Published by

The Editorial Office of Industrial Water Treatment

Address: No. 3 Road Dingzigu,Hongqiao District, Tianjin ,China

Postcode: 300131

Editorial Office: 86-22-26689330

Advertising Department:

86-22-26689033 26678212

E-mail: iwt@iwt.cn

URL: //www.iwt.cn

Distributed in China by

Tianjin Post Newspaper and Magazine Publishing Bureau

Distributed abroad by

China International Book Trade Co.

Subscribing place:

All the post offices in China

China standard serial number:

ISSN 1005-829X

China serial number:

CN 12-1087/X

Post distributing number:

domestic:6-61 abroad: 4515MO

Issuing scope: Open Publishing

Publishing date: 2019-02-20

Price: 30.00(CNY)(Domestic)

16.00(US \$)(Foreign)

CONTENTS

SUMMARIES AND THESES ON SPECIAL TOPICS

Coupling mechanism of anaerobic ammonia oxidation and denitrifying phosphorus removal Chen Ya,Yin Wen,Wu Peng ,et al(1)

Research progress in the chemical control over membrane fouling in membrane water treatment Zhou Chao,Wu Donghai,Lu Guanghua ,et al(6)

Research progress in the fate of the pharmaceuticals and personal care products(PPCPs) in environmental media and their advanced oxidative degradation Wang Yongqiang,Zhang Lingli,Yang Chuanxi ,et al(11)

Checking on the treatment ability of electrochemical scale removing technology and its improvement Xu Hao,Lei Jiani ,Yang Honghui ,et al(17)

RESEARCH AND EXPERIMENT

Inhibition mechanism of the supramolecular corrosion inhibitor on the iron content in condensate water Fan Baomin,Lü Jinyu ,Yang Biao ,et al(21)

Research on the photo-catalytic degradation of organic wastewater containing salicylic acid by molecularly imprinted TiO₂ Wu Pengfei,Zhu Lei ,Wang Xun ,et al(26)

Preparation of composite photo-catalyst g-C₃N₄/TiO₂ and its photocatalytic capability under visible light Liu Hongwei,Ren Xuechang,Wan Jianxin ,et al(30)

Influences of SRT on S-EPS and membrane fouling in a HMBR Liu Qiang,Liang Sen ,Yan Junwei ,et al(34)

Application of electrodialysis technology to the reclamation of resin stripping liquid Cao Xun,Ding Xinchun,Chen Lifang ,et al(38)

Research on the advanced oxidation process for the treatment of wastewater from flame retardant cloth production Duan Wenjie,Tian Zhenbang,Zhao Kejiang ,et al(42)

Research on the electrochemical oxidation method for the removal of sulfamethazine from water Lan Mei,Sun Fengkun,Zhang Huining ,et al(46)

Research on the preparation of a new type of composite photocatalyst TiO₂-GR/MgO and its degradation capability for Congo red Rao Yandi,Sheng Yiping,Zhou Cheng ,et al(50)

Research on the synthesis of maleamic acid monomer and its scale inhibition capability after polymerization Fan Yajun and Liang Bing(54)

Research on the filtering-aid effect of chitosan under low temperature and low turbidity influent conditions

..... Wang Shan,Zhang Kefeng,Ren Jie(58)

Research on the chitosan-modified activated carbon fiber felt for the treatment of copper-containing wastewater

..... Wang Meng,Luo Yunbai,Yu Ping(62)

Quick start-up of the combined ASBR–SBR–ASBR process for the treatment of organic wastewater containing nitrogen

..... Zhao Ying,Duan Yun,Yang Jingjing,et al(66)

Treatment of high-concentration waste emulsion by the combined vibratory shear enhanced processing and disk tube-reverse osmosis process

..... Feng Fanrang,Zheng Shuaifei,Hu Yuanjuan,et al(70)

Research on the removing effect of MBR process on pollutants in coal liquefaction wastewater

..... Wang Baolian and Yang Fan(75)

Research on the pyrolysis and corrosion characteristics of organic matter in boiler water vapor

..... Jin Xuliang,Cao Fan,Guo Tingting(78)

Research on the electrical regeneration mechanisms of ion exchange resins

..... Jin Xindi,Li Tianjun,Yan Yilei,et al(81)

WATER TREATMENT IN OIL–GAS FIELD

Research and application of a sea nanofiltration water treatment technology

..... Song Jifeng,Xie Siyu,Zheng Huaan,et al(86)

ANALYSIS AND DETERMINATION

Improvement of detection method for the main water quality indexes of reinjection produced water in Weizhou Oilfield

..... Wang Chuang,Zheng Huaan,Li Yanchuang,et al(89)

PROJECT CASE

Modification project for the biochemical treatment system of coking wastewater in Ganglu Iron and Steel Co.

..... Yue Lifang,Zhou Hongxing,Zhang Liancheng(92)

Research on the engineering application of the recycling treatment technology of high salinity wastewater in coal chemical industry

..... Ren Tongwei,Yu Bin,Yang Chunfang,et al(96)

Research on the treatment of traditional Chinese medicine extracting wastewater with micro-electrolysis–UASB–MBBR process and engineering application

..... Wang Zonghua and Zhao Dongsheng(99)

EXCHANGES OF EXPERIENCES

Analysis on the factors influencing the detection results of silting density index(SDI) in a water treatment projects

..... Zhao Jun(103)

Steam quality coordination treatment method for a kind of drum boilers with small diameter

..... Zhang Yuting and Feng Xiangdong(106)

Industrial Water Treatment(Monthly)

Founded in 1981, Industrial Water Treatment is a professional and technical journal sponsored by CenerTech Tianjin Chemical Research & Design Institute Co.,Ltd. and cooperated by the National Engineering & Technology Research Center for Industrial Water Treatment reporting the technical dynamic information, special topic reviews, research reports, engineering cases, summary of experiences, scientific management and industry news flashes, etc. on industrial wastewater, circulating cooling water, boiler water, and process water etc. in China and abroad. It is suitable for teachers and students in colleges and universities, technologists in scientific research and design organizations, and operational & managerial personnel in enterprises in the field of water treatment to subscribe.

Advance Notice

- Research progress in the active bromine biocides
- Current situation of and research progress in slaughter and meat processing wastewater treatment
- Current pollution status and advanced oxidation treatment of pharmaceuticals in water
- Optimization of photoelectron–Fenton oxidation for treating printing and dyeing wastewater by response surface method
- Pyrolysis for the synthesis of $\text{In}_2\text{O}_3\text{--TiO}_2$ nanotube with enhanced photo-catalytic activity
- Research on hydrotalcite-based solid hydrogen peroxide for the treatment of metal complex dyes in water
- Treatment technology of flowback waste liquid for oil/water well acidizing operation
- Research on the on-line monitoring system for in situ waterquality total phosphorus on the basis of micro-control technology
- Case of the treatment of pesticide intermediates wastewater by physicochemical pretreatment–CASS process
- Feed water weak oxygenated treatment technology of the 1 000 MW ultra-supercritical unit and its application