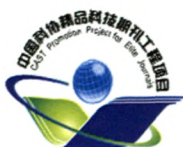


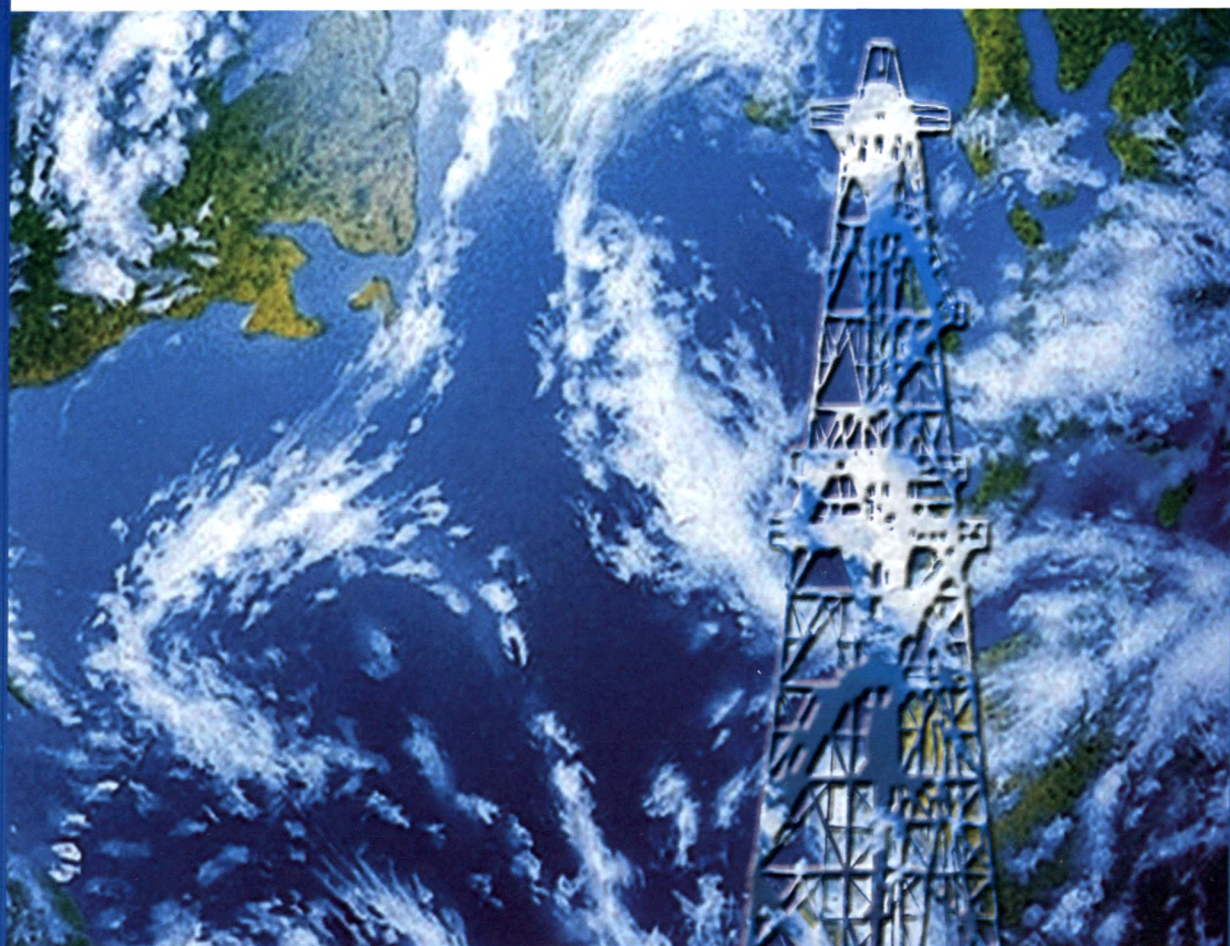
SHIYOU XUEBAO



ISSN 0253-2697
CN 11-2128/TE
CODEN SYHPD9

石油学报

ACTA PETROLEI SINICA



中国石油学会主办

第33卷 第3期 Vol.33 No.3

ISSN 0253-2697



9 770253 269004

2012 3

万方数据

石 油 学 报

第 33 卷 第 3 期 2012 年 5 月

目 次

地质勘探

- 中国致密油评价标准、主要类型、基本特征及资源前景 贾承造 邹才能 李建忠 李登华 郑 民 (343)
- 陆东地区火成岩形成时代与构造背景及火山岩储层成因 罗静兰 侯连华 蒋宜勤 邵红梅 杨艳芳 郭永峰 康 静 (351)
- 准噶尔盆地油层无机地球化学响应与识别 曹 剑 王绪龙 胡文瑄 张越迁 唐 勇 向宝力 (361)
- 轮南地区碳酸盐岩油气藏类型对地层水特征的控制作用 刘大永 陈 健 彭平安 肖中尧 张宝收 卢玉红 张海祖 于赤灵 (367)
- 塔北英买力低凸起奥陶系油藏充注历史的流体包裹体证据 肖 晖 赵靖舟 杨海军 蔡振忠 张丽娟 朱永峰 (372)
- 松辽盆地北部青山口组一段有效烃源岩评价图版的建立及意义 霍秋立 曾花森 张晓畅 付 丽 (379)
- 东营凹陷超压顶封层及其附近砂岩中碳酸盐胶结物的成因 韩元佳 何 生 宋国奇 王永诗 郝雪峰 王冰洁 罗胜元 (385)
- 东尼日尔 Termit 盆地构造演化及古近系油气成藏主控因素 刘 邦 潘校华 万仓坤 苏永地 毛凤军 刘计国 吕明胜 王玉华 (394)
- 关键成藏期碎屑岩储层古孔隙度恢复方法 梁冬芳 姜振学 刘惠民 高永进 (404)
- 断层侧向封闭性定量研究方法的改进 付 广 史集建 吕延防 (414)
- 压汞法和气体吸附法研究富有机质页岩孔隙特征 田 华 张水昌 柳少波 张 洪 (419)
- 油气运移输导层研究及量化表征方法 罗晓容 雷裕红 张立宽 陈瑞银 陈占坤 许建华 赵 健 (428)

油田开发

- 低渗透油藏储层分级评价方法及应用 张仲宏 杨正明 刘先贵 熊 伟 王学武 (437)
- 非均质油藏多尺度混合有限元数值模拟方法 姚 军 张 娜 黄朝琴 王月英 (442)
- 水平井泡沫酸化分流数值模拟 周生田 李兆敏 王 飞 (448)
- 特低渗透砂岩大型露头模型单相渗流特征实验 徐 轩 刘学伟 杨正明 薛成国 滕 起 徐 依 (453)
- 大庆油田二类油层复合驱注入方式优化 陈广宇 田燕春 赵 新 李 星 (459)
- 扶余油田基于单因素解析多因素耦合的剩余油预测 封从军 鲍志东 陈炳春 魏兆胜 汪 莹 (465)

石油工程

- 基于分形维数的钻头优选指数标度法及其应用 闫 铁 张 杨 李 玮 阎玉良 侯 圣 杜树明 (472)
- 基于可靠性方法的储层钻井坍塌压力分析 张立松 闫相祯 田中兰 杨恒林 杨秀娟 (477)
- 浮式钻井平台主动式钻柱升沉补偿装置设计 姜 浩 刘衍聪 张彦廷 刘振东 白 鹿 (483)
- 胶凝原油管道恒流量启动过程中的启动波速 肖文涛 张国忠 刘 刚 刘 坤 朱宜亮 (487)
- 埋地管道小泄漏模型及数值求解 熊兆洪 李振林 官 敬 李 克 (493)
- LNG 储罐外墙温度应力分析及预应力筋设计 程旭东 朱兴吉 (499)
- 疲劳载荷作用下 X80 管线钢夹杂物的微观行为 李少华 曾燕屏 全 珂 (506)

学术论坛

- 基于油价随机过程的国际石油合同模式经济性分析 汪东进 李秀生 刘明明 王震 (513)

综 述

- 油田开发战略与接替技术 何江川 廖广志 王正茂 (519)
- 低碳视角下中国非常规天然气的开发利用前景 云 箭 章国军 徐凤银 李兴春 钟宁宁 吴伟涛 (526)

综合信息

- 中国科学技术协会所属全国学会关于“加强科技期刊科学道德规范 营造良好学术氛围”的联合声明 (413)

本期责任编辑：黄小娟

CONTENTS

PETROLEUM EXPLORATION

- Assessment criteria, main types, basic features and resource prospects of the tight oil in China JIA Chengzao, ZOU Caineng, LI Jiansong, LI Denghua, ZHENG Min(343)
- Chronology and tectonic settings of igneous rocks and origin of volcanic reservoirs in Ludong area, eastern Junggar Basin LUO Jinglan, HOU Lianhua, JIANG Yiqin, SHAO Hongmei, YANG Yanfang, GUO Yongfeng, KANG Jing(351)
- The inorganic geochemical response to oil/water intervals in Junggar Basin and its application CAO Jian, WANG Xulong, HU Wenxuan, ZHANG Yueqian, TANG Yong, XIANG Baoli(361)
- The control of reservoir types in Lunnan oilfield on characters of formation water LIU Dayong, CHEN Jian, PENG Ping'an, XIAO Zhongyao, ZHANG Baoshou, LU Yuhong, ZHANG Haizu, YU Chiling(367)
- Evidence of fluid inclusions for the hydrocarbon charging history of Ordovician reservoirs in Yingmaili low-uplift, northern Tarim Basin XIAO Hui, ZHAO Jingzhou, YANG Haijun, CAI Zhenzhong, ZHANG Lijuan, ZHU Yongfeng(372)
- An evaluation diagram of effective source rocks in the first member of Qingshankou Formation in northern Songliao Basin and its implication HUO Qiuli, ZENG Huasen, ZHANG Xiaochang, FU Li(379)
- Origin of carbonate cements in the overpressured top seal and adjacent sandstones in Dongying depression HAN Yuanjia, HE Sheng, SONG Guoqi, WANG Yongshi, HAO Xuefeng, WANG Bingjie, LUO Shengyuan(385)
- Structural evolution and main controlling factors of the Paleogene hydrocarbon accumulation in Termit Basin, eastern Niger LIU Bang, PAN Xiaohua, WAN Lunkun, SU Yongdi, MAO Fengjun, LIU Jiguo, LÜ Mingsheng, Wang Yuhua(394)
- A reconstruction method of porosity for clastic reservoirs during the crucial period of hydrocarbon accumulation QU Dongfang, JIANG Zhenxue, LIU Huimin, GAO Yongjin(404)
- An improvement in quantitatively studying lateral seal of faults FU Guang, SHI Jijian, LÜ Yanfang(414)
- Determination of organic-rich shale pore features by mercury injection and gas adsorption methods TIAN Hua, ZHANG Shuichang, LIU Shaobo, ZHANG Hong(419)
- Characterization of carrier formation for hydrocarbon migration: concepts and approaches LUO Xiaorong, LEI Yuhong, ZHANG Likuan, CHEN Ruiyin, CHEN Zhankun, XU Jianhua, ZHAO Jian(428)

OIL FIELD DEVELOPMENT

- A grading evaluation method for low-permeability reservoirs and its application ZHANG Zhonghong, YANG Zhengming, LIU Xiangui, XIONG Wei, WANG Xuewu(437)
- Multiscale mixed finite element numerical simulation for heterogeneous reservoirs YAO Jun, ZHANG Na, HUANG Zhaoqin, WANG Yueying(442)
- Numerical simulation on the foam acidizing diversion in horizontal wells ZHOU Shengtian, LI Zhaomin, WANG Fei(448)
- An experimental study on single-phase seepage characteristics with a large-scale model made of ultra-low permeability sandstone outcrops XU Xuan, LIU Xuewei, YANG Zhengming, XUE Chengguo, TENG Qi, XU Yi(453)
- Optimization of the ASP flooding injection pattern for sub-layers in Daqing oilfield CHEN Guangyu, TIAN Yanchun, ZHAO Xin, LI Xing(459)
- Application of the single factor analysis and multifactor coupling method to the remaining oil prediction in Fuyu oilfield FENG Congjun, BAO Zhidong, CHEN Bingchun, WEI Zhaosheng, WANG Ying(465)

PETROLEUM ENGINEERING

- An index-scaling procedure for bit optimization based on the fractal dimension and its application YAN Tie, ZHANG Yang, LI Wei, YAN Yuliang, HOU Sheng, DU Shuming(472)
- A collapse pressure analysis in reservoir drilling based on the reliability method ZHANG Lisong, YAN Xiangzhen, TIAN Zhonglan, YANG Henglin, YANG Xujuan(477)
- Design for an active drill-string heave compensation system of the floating drilling platform JIANG Hao, LIU Yancang, ZHANG Yanting, LIU Zhendong, BAI Lu(483)
- The start-up wave speed during the initial start-up of a pipeline with gelled crude oils at a constant flow rate XIAO Wentao, ZHANG Guozhong, LIU Gang, LIU Kun, ZHU Yiliang(487)
- A model for underground pipeline small leakage and its numerical solution XIONG Zhaohong, LI Zhenlin, GONG Jing, LI Ke(493)
- Thermal stress analyses on external wall of LNG storage tank and the design of prestressed reinforcement CHENG Xudong, ZHU Xingji(499)
- Micro-behaviors of inclusions in the X80 pipeline steel under fatigue loading LI Shaohua, ZENG Yanping, Tong Ke(506)

ACADEMIC FORUM

- A simulation analysis on international petroleum contracts based on the stochastic process of oil price WANG Dongjin, LI Xiusheng, LIU Mingming, WANG Zhen(513)

REVIEW

- Oilfield development strategy and replacement techniques HE Jiangchuan, LIAO Guangzhi, WANG Zhengmao(519)
- Development and utilization prospects of unconventional natural gas in China from a low-carbon perspective YUN Jian, QIN Guojun, XU Fengyin, LI Xingchun, ZHONG Ningning, WU Weitao(526)