闫伟 副研究员

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个人信息：

姓名：闫伟

职称：副研究员、硕士生导师

研究方向：井筒腐蚀与力学完整性、非常规致密储层水-岩相互作用及缝网形成、油井防砂与筛管冲蚀等

电子邮箱： yanwei@cup.edu.cn; yanwei289@126.com.

联系电话： 18511885997

教育和工作经历：

2017.06 - 至今	中国石油大学（北京）	副研究员
2012.07 - 2017.05	中国石油大学（北京）	助理研究员
2013.01 - 2014.03	美国Ohio University	博士后
2007.09 - 2012.07	中国石油大学（北京）	博士（硕博连读）
2003.09 - 2007.07	长江大学（原江汉石油学院）	学士

论文著作：

[1] Wei Yan, Bruce Brown, Srdjan Nesic. Investigation of the Threshold Level of H_2S for Pitting of Mild Steel in CO_2 Aqueous Solutions. *NACE International 2018*, Paper No.11472. (EI)

[2] Wei Yan, Lingzhan Zou, Hong Li, et al. Investigation of Casing Deformation during Hydraulic Fracturing in High Geo-stress Shale Gas Play[J]. *Journal of Petroleum Science and Engineering*. 150(2017): 22-29.(SCI)

[3] Wei Yan, Jianguo Chen, Jingen Deng, et al. Experimental test of Mode I Fracture Toughness on Sichuan Basin Gas Shale under Air Dried and Water Saturated Conditions. *ARMA* 2017, Paper No.363(EI)

[4] Wei Yan, Hongkui Ge,Jianbo Wang, et al. Experimental Study of the Friction Properties and Compressive Shearing Failure Behaviors of Gas Shale under the Influence of Fluids. *Journal of Natural Gas Science and Engineering*.2016, 33 (2016) :153-161(SCI)

[5] Wei Yan, Zhu Peike, Deng Jingen. Corrosion Behaviors of SMSS 13Cr and DSS 22Cr in H_2S/CO_2-Oil-Water Environment. *International Journal of Electrochemical Science*,2016, 11 (2016) 9542-9558 (SCI)

[6] Wei Yan, Lei Guan, Yun Xu, Jin-Gen Deng. Numerical Simulation of the Double Pits Stress Concentration in A Curved Casing Inner Surface. *Advances in Mechanical Engineering*.2017, Vol.9 (1)1-7,(SCI)

[7] Wei Yan,Yong Xiang,Wenliang Li, et al. Downhole CO_2 Partial Pressure Calculation and Tubing Material Selection-A Case Study of an Offshore Oil Field in the South China Sea. *Anti-Corrosion Methods and Materials*.2016, 63 (5):414-420. (SCI)

[8] Wei Yan, Yun Xu, Yi Zhou, et al. Investigation of Stress Concentration and Casing Strength Degradation Caused by Corrosion Pits. *International Journal of Corrosion*, Vol. 2016, Article ID 6930234, (EI)

[9] Wei Yan. Field Corrosion Test in High H_2S Containing Production Flow by Using a New Testing Apparatus.The 2016 International Field Exploration and Development Conference(IFEDC),Paper and Presentation. (EI)

[10] Wei Yan, Zi-jianChen,Jin-genDeng et al. Numerical method for subsea wellhead stability analysis in deepwater drilling [J]. *Ocean Engineering*, 2015, 98(1):50-56. (SCI)

[11] Wei Yan, Jingen Deng, Peike Zhu, et al. Investigation of pH_2S influence on 3% Cr tubing steel corrosion behaviours in CO_2-H_2S-Cl environment[J].*Corrosion Engineering, Science and Technology*. 2015, 50(7): 525-532, (SCI)

[12] Wei Yan. Frictional Characteristics of Shale and Their Influence on Hydraulic Stimulating Fractures under the Effect of Fracturing Fluids. China Shale Gas 2015, Presentation.

[13] Yan Wei, Deng JinGen, Li XiaoRong et al. Effects of silty sand on CO_2 corrosion behavior of low-Cr tubing steel[J].*Chinese Science Bulletin*, 2012,57(8):927-934. (SCI)

[14] Wei Yan, Jingen Deng, Wenliang Li,et al. Experimental study of 3%Cr Tubing Steel in CO_2 and CO_2/H_2S Corrosion Environment[J]. *SPE Oil and Gas Facilities*, 2012:43-48.SPE No.157302PA (EI)

[15] Wei Yan, Kongyang Wang, Wenbo Li, et al. Subcritical Crack Propagation Tests on Tight Oil Sandstone under Different Fluid Conditions. ARMA 2018, Paper No.943.

[16] Kongyang Wang, Wei Yan*, Jingen Deng et al. Experimental study on H_2S and CO_2 generation capacities of the Bohai bay heavy oil. *Journal of Petroleum Science and Engineering*, 167(2018):241-248. (SCI)

[17] Zhihua Luo, Wei Yan*, Peike Zhu, et al (2018). Corrosion behavior of a 3 % Cr tubing steel in a CO_2 saturated high-salinity brine. *Materials Testing*: Vol. 60, No. 3, pp. 245-250. (SCI)

[18] Peike Zhu,Wei Yan*, Liyu Deng, et al. The Application of Mechanical-Chemical Corrosion Theory in Downhole Tubing CO_2 Corrosion Research [J]. *Advances in Materials Science and Engineering*,2015.ID 296278 (SCI)

[19] Jingen, D.,Wei, Y., Xiaorong, L.,Xiaoqin, D. Influence of H_2S Content on CO_2 Corrosion Behaviors of N80 Tubing Steel[J].*Petroleum Science and Technology*, 2011, 29(13):1387-1396.(SCI)

[20] Yong Xiang, Wei Yan, Jiangyun Wang. Solubility of oxygen in various alkanolamine- water solutions at low partial pressure. *Asia-Pac. J. Chem. Eng*.2015,(SCI)

[21] 闫伟,邓金根,邓福成,朱海燕. 油套管力学-化学腐蚀规律分析[J].中国海上油气,2014,26(1):87-91.

[22] 闫伟,邓金根,袁俊亮,朱培珂,秦飞翔.油套管钢长周期CO_2腐蚀速率的测试及准确计算方法[J].材料保护,2014,47(08):71-74.

[23] 闫伟,邓金根,李晓蓉,董星亮,张春阳.粉砂对低Cr油管钢CO_2腐蚀行为的影响[J].科学通报, 2012,57(4):291-298.

[24] 闫伟,邓金根,董星亮,张春阳,李扬,李文良.油气井CO_2分压计算方法探讨[J].钻采工艺,2011,34(5):19-21.

[25] 闫伟.浅海隔水管临界工况确定[C].石油工业出版社,第六次全国深层岩石力学学术会议论文集,2010.

[26] 汪衍刚,闫伟*,王孔阳等. 几种热采井用油管钢在次生H_2S/CO_2环境中的腐蚀行为.腐蚀与防护,2018,39(6)443-448.

[27] 王孔阳,闫伟*,邓金根等.渤海稠油热解规律与次生腐蚀气体分压计算[J]. 2017 IPPTC国际石油石化技术会议,2017,16-24.

[28] 王厚东,闫伟*,孙金等. 稠油热采井注热过程数值模拟与参数优选.中国海上油气.2016,28(5):104-109

[29] 朱培珂,闫伟,李令东等.油管钢在模拟超临界CO_2 中耐蚀特性的研究.表面技术.2016,,45(12):167-173.

[30] 陈建国,闫伟*,邓金根等. 页岩储层强度水敏性及变形破坏CT成像试验研究[J]. 非常规油气钻井基础理论研究与前沿技术开发新进展,2014.

知识产权：

[1] PCT国际申请:固井缺陷诱发压裂套管局部形变的模拟实验系统及方法.CN2017/082842 (排名1)

[2] 授权发明: 全角度检测油气管道内壁腐蚀的现场测试装置.ZL 201610751407.7 (排名1)

[3] 授权发明: 评价防砂筛管冲蚀速率的方法及专用装置. ZL 201510161646.2 (排名1)

[4] 授权发明: 模拟致密储层水平井固井缺陷诱发套管变形的实验装置.ZL 201710261455.2 (排名1)

[5] 授权发明: 模拟致密储层水平井固井缺陷诱发套管变形的方法.ZL 201710261462.2 (排名1)

[6] 授权发明: 一种不同流体作用下岩石摩擦强度测量装置. ZL 201510350896 (排名1)

[7] 授权发明: 一种用于测量致密岩石阻抗特征的密封固定测量装置. ZL 201610534979.X (排名1)

[8] 授权发明: 一种岩石亚临界裂纹扩展可视化实验装置.ZL 201710448591.2 (排名1)

[9] 授权发明: 由短期测试结果计算长期腐蚀速率的方法.专利号：ZL 201110065540.4 (排名2)

[10] 授权发明: 辅助评价管道材质现场腐蚀的检测装置. ZL 201310633526. (排名3)

[11] 授权新型: 评价气井防砂筛网抗冲蚀程度的实验装置. ZL 201620972281.1 (排名1)

[12] 授权新型: 评价油气合采井防砂筛网抗冲蚀程度的实验装置. ZL 201620972282.6 (排名1)

[13] 授权新型: 一种实验用稠油热解混合气体收集和处理装置.ZL 201720153019.9 (排名2)

[14] 授权新型: 一种提高压机位移精度的底部压头转换装置. ZL 201621118431.9 (排名2)

[15] 登记软件著作权：井下管柱CO_2腐蚀预测软件. 登记号2015SR090555. (排名1)

科研项目：

[1] 国家青年科学基金项目：压裂液作用下页岩储层的摩擦特性及其对缝网形成的影响（51504267），2016.1-2018.12，负责人

[2] “十三五” 及中长期页岩气开发问题研究，国家能源局，2014-2015，研究骨干

[3] “十二五” 国家科技重大专项子课题 “疏松砂岩稠油油藏完井方式综合研究”，2011-2015，研究骨干

[4] Investigation of Mechanochemical Corrosion in Oil and Gas industry，博士后课题，2013-2014，负责人

[5] Inhibition Mechanism in Under Deposit Corrosion, NalcoChampion-ICMT项目，2013-2014，研究骨干

[6] 致密砂岩压裂裂缝延伸规律模拟实验研究技术开发，横向课题，2014.6-2015.12，负责人

[7] 海上热采井完井及长效防砂技术研究，横向课题，2014-2015，研究骨干

[8] LD5-2N油田热采井套管（CO_2/H_2S）腐蚀-热应力耦合强度设计与防腐研究，横向课题，2016-2017，负责人

[9] 文昌9-2/9-3气田油套管超临界CO_2腐蚀及防腐方案优化研究，横向课题，2014-2015，负责人

荣誉与奖励：

[1] 中国石油大学（北京）优秀教师，2016

[2] 中国石油大学（北京）大学生科技创新优秀指导教师，2015

[3] 国家能源局-能源软科学奖（省部级，二等），排名6/10，2015

社会与学术兼职：

SPE会员、ARMA会员；《Materials and Design》、《Journal of Petroleum Science and Engineering》、《Industrial & Engineering Chemistry Research》、《Marine Georesources & Geotechnology 》、《中国海洋大学学报（英文版）》等SCI期刊审稿人。