



第七届数字油田国际学术会议

The 7th Digital Oil Field International Academic Conference

DOFIAC 2021

陕西省科协2021年度国际和海峡两岸暨港澳科技交流活动项目

2021 Science and Technology Exchange Project on International, Cross-strait, Hong Kong and Macao of Shaanxi Association for Science and Technology

会议指南

Conference Guide

2021年11月3-5日
3-5 November, 2021



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数字化转型升级 智能油气田建设

Digital Transformation Upgrading and Intelligent Oil Gas Field Construction

2021年11月3-5日

3-5 November, 2021

会议委员会

■ 会议指导委员会

顾问(院士): 汤中立 李佩成 康玉柱 李 阳 李根生
指导专家: 沙爱民 古学进 李德芳 王同良 聂晓炜 兰建文 张喜平
曹栋梁 扈广法 李文明 刘顺春 金明权 郑明科 高振东
付 峰 谭虎娃 胡启月 王国力 雷鸣章 王永东 高志亮
会议主席: 贺拴海 朱杰君 李剑峰
会议副主席: 韩 玲 蒋在文 杨耀忠
秘 书 长: 于 强

■ 会议组织委员会

主 任: 李荣西 段鸿杰 张辛耘
副 主 任: 焦建刚 蔡 权 马承杰 王记江
执行主任: 付国民 张志强 甄延忠
委 员: 张添锦 丛 慧 陈克鹏 王建平 陈绍凯 唐爱武 夏加斌
彭 英 孙 佳 乔泉熙 王竹君 肖红卫 孟选刚 周娇娇
杨 帆 张 晖 穆殿宝 付明波 刘江涛 文彬麟 郭晓东
孙少波 马锦梅

■ 会议学术委员会

主 席: 贺拴海 聂晓炜 金明权 胡启月 付 峰
外籍副主席: 亚采克·祖拉达 陈掌星 罗贝洛·萨缪尔
国内副主席: 韩 玲 杨耀忠 张辛耘 王记江
外籍委员: 艾哈迈德·莎玛里 帕特里克·邦格特 羊争鸣
国内委员: 李荣西 肖 波 段鸿杰 鲁玉庆 张志强 李 荣 路利军
甄延忠 白宗文 张富春 管尊友 王 权 曾 颖 周 军
杨世海 陈 坚 张文坡 窦宏恩 高志亮 付国民 刘 展
金 戈 王 迪 李大伟 陆敬武 何岩峰 曹 瑜 李美玉

CONTENT |



目录

■ 会议概要.....	01
■ 会议作息时间表.....	03
■ 会议议程.....	06

■ 会议须知.....	16
■ 会议附录1.....	19
■ 会议附录2.....	21



会议概要



1、会议主旨 为数字油田学界、业界搭建学术与技术交流平台，促进数字化转型升级与智能油田建设，增进技术与产品的创新研发。

2、会议主题 数字化转型升级 智能油气田建设

3、会议专题

- ① 工业互联网云平台；
- ② 数字勘探与测井；
- ③ 油气生产信息智能化应用；
- ④ 塔里木智能油气田建设与数字化转型；
- ⑤ 大数据与人工智能应用；
- ⑥ 智能工程与人才培养。

4、会议组织

指导单位： 国家教育部 国家工信部 国家能源局 中国地质调查局
中国石油学会 中国石油天然气集团有限公司
中国石油化工集团有限公司 中国海洋石油集团有限公司
陕西延长石油(集团)有限责任公司

主办单位： 长安大学 中国石油化工股份有限公司胜利油田分公司
陕西省科学技术协会 陕西省石油学会 延安大学

承办单位： 长安大学智慧油气田研究院 胜利油田分公司信息化管理中心
西安贵隆数字化工程科技有限责任公司 西安数源软件有限公司
西安聚典会务服务有限公司

协办单位： 长安大学科学研究院 长安大学国际合作与交流处 长安大学科技园
长安大学地球科学与资源学院
《中国学术期刊(光盘版)》电子杂志社有限公司

会议作息时间表



2021年11月1日

09:00-18:00 Zoom线上签到与缴费及开票资料确认

15:00-17:00 论文评奖委员会评审论文（Zoom视频会议室）

2021年11月2日

09:00-18:00 线上Zoom互动式视频会议测试

第一天 2021年11月3日 星期三

上午 大会开幕式 领导致辞 特邀主旨报告等

- 08:00-08:10 参会代表入场
- 08:10-08:20 大会说明
- 08:20-08:30 欢迎领导、嘉宾
- 08:30-09:30 大会开幕式及领导致辞
- 09:30-09:40 专著首发与赠书仪式
- 09:40-09:50 团体合影
(西安地点: 学术交流中心门口, 遇雨雪另行安排)
(东营地点: 胜利宾馆门口, 遇雨雪另行安排)
- 09:50-10:00 休息
- 10:00-12:00 第一单元 特邀主旨报告
- 12:00-14:00 午餐(西安用餐: 万帝美途酒店院内一楼大厅)
(东营用餐: 胜利宾馆餐厅)



下午 第二、三单元 各专题

- 14:00-18:00 并行第二单元：工业互联网云平台专题
- 14:00-16:05 上半场专题报告
- 16:05-16:20 休息
- 16:20-18:00 下半场专题报告
- 14:00-18:00 并行第三单元：数字勘探与测井专题
- 14:00-16:05 上半场专题报告
- 16:05-16:20 休息
- 16:20-18:00 下半场专题报告
- 18:00-20:00 晚餐（西安用餐：万谛美途酒店院内一楼大厅）

第二天 2021年11月4日 星期四

上午 第四单元 油气生产信息智能化应用专题

- 08:30-10:10 上半场专题报告
- 10:10-10:30 休息
- 10:30-12:00 下半场专题报告
- 12:00-14:00 午餐（西安用餐：万谛美途酒店院内一楼大厅）
（东营用餐：胜利宾馆餐厅）

下午 第五单元 塔里木智能油气田建设与数字化转型专题

- 14:00-16:05 上半场专题报告
- 16:05-16:15 休息
- 16:15-18:00 下半场专题报告
- 18:00-20:00 晚餐（西安用餐：万谛美途酒店院内一楼大厅）

会议作息时间表



第三天 2021年11月5日 星期五

上午 第六单元 大数据与人工智能应用专场

- 08:30-10:20 上半场专题报告
- 10:20-10:30 休息
- 10:30-12:00 下半场专题报告
- 12:00-14:00 午餐（西安用餐：万谛美途酒店院内一楼大厅）
（东营用餐：胜利宾馆餐厅）

下午 第七单元 智能工程与人才培养专场

- 14:00-16:25 上半场专题报告
- 16:25-16:30 休息
- 下半场 论文表彰 闭幕式
- 16:30-16:40 优秀论文表彰仪式
- 16:40-16:50 宣读共识文件：《东营宣言》
- 16:50-17:00 大会总结与闭幕
结束 晚安

备注：本次会议报告共分为七个单元，请各位报告人控制好报告时长，感谢您的配合！

第一天 2021年11月3日 星期三

上午 大会开幕式与特邀主旨报告

- 08:00-08:10 参会代表入场 播放“长安大学”、“胜利油田”宣传片
(远程代表进入线上Zoom会场、西安本地代表进入长安大学学术中心报告厅、山东代表进入胜利宾馆会议中心报告厅)
- 08:10-08:20 大会说明：付国民
(长安大学地球科学与资源学院教授、智慧油气田研究院院长，会议执行主任)
- 08:20-08:30 欢迎领导、嘉宾
- 08:30-09:30 大会开幕式、领导致辞
主持人：韩玲（长安大学科研院副院长、教授、博导，会议副主席）
介绍嘉宾
长安大学领导致辞：贺拴海 副校长
中国石化胜利油田分公司领导致辞：聂晓炜 副总经理
陕西省科学技术协会领导致辞：张俊华 副主席
陕西省石油学会领导致辞：张辛耘 秘书长
延安大学领导致辞：谭虎娃 党委委员、副校长
- 09:30-09:40 《数字油田在中国——智慧油气田建设》专著首发与赠书仪式
主持人：焦建刚（长安大学地球科学与资源学院副院长）
- 09:40-09:50 团体合影（视情况而定）
(西安地点：学术交流中心门口，遇雨雪另行安排)
(东营地点：胜利宾馆门口，遇雨雪另行安排)
- 09:50-10:00 休息

会议议程

上午 第一单元 特邀主旨报告

主持人：段鸿杰，中国石油化工股份有限公司胜利油田分公司信息化管理中心经理

- 10:00-10:25 李剑峰 中国石油化工集团有限公司首席专家、信息和数字化管理部副总经理
智慧石化建设探索、升级与前瞻
- 10:25-10:50 Robello Samuel（罗贝洛·萨缪尔）
美国哈里伯顿公司首席技术顾问和技术研究员
井建4.0——引人注目的数字化转型
- 10:50-11:15 Patrick David Bangert（帕特里克·邦格特）
三星SDS公司人工智能副总裁
金属温度在AMSE管道等级优化中的应用与计算
- 11:15-11:35 高志亮 长安大学智慧油气田研究院首席专家
智慧建设：是我们石油人的一个向往
- 11:35-12:00 杨耀忠 中国石油化工股份有限公司胜利油田分公司首席专家
胜利智能油田建设规划与进展
- 12:00-14:00 午餐（西安用餐：万帝美途酒店院内一楼大厅）
（东营用餐：胜利宾馆餐厅）

下午 第二单元 工业互联网云平台

上半场主持人：刘宝军，中国石油化工股份有限公司胜利油田分公司信息化管理中心副经理

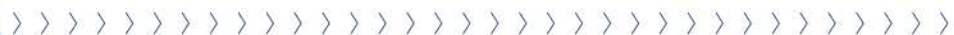
- 14:00-14:25 马承杰 中国石油化工股份有限公司胜利油田分公司油田信息系统运维专家
胜利油田“数据+平台+应用”信息化新模式探索与实践
- 14:25-14:50 李虎 中国石油化工股份有限公司胜利油田分公司信息化管理中心高级主管
石化智云油田开发测试区应用



- 14:50-15:15 曹瑜 中国石油天然气股份有限公司塔里木油田分公司勘探开发研究院
规划信息所副所长、高级工程师
基于梦想云的勘探开发协同研究平台的建设实践
- 15:15-15:40 林科 杭州谐云科技有限公司技术总监
云原生技术在石化行业的应用
- 15:40-16:05 袁梓超 网易杭州研究院网易云原生解决方案专家
云原生解决方案专家
网易基于云原生的数字化体系建设
- 16:05-16:20 休息

下半场主持人：邴绍强 中国石油化工股份有限公司胜利油田分公司云服务专家

- 16:20-16:45 陈维东 中国石油化工股份有限公司胜利油田东胜公司信息中心副经理
基于组态的油藏开发可视化动态监测技术
- 16:45-17:10 吴艳 中国石油吐哈油田信息技术公司软件运维中心系统
助理工程师
地理信息系统在吐哈油田的应用
- 17:10-17:35 李大伟 中国石油天然气集团有限公司勘探开发研究院全球油气资源与
勘探规划研究所主任
全球油气资源信息系统研制与共享
- 17:35-18:00 李志元 阿里云计算有限公司高级架构师
数据智能驱动企业数字化转型



下午 第三单元 数字勘探与测井（并行会议）

上半场主持人：窦宏恩 中国石油天然气集团有限公司勘探开发研究院教授级高级工程师

- 14:00-14:25 李航宇 中国石油大学（华东）石油工程学院教授、博士生导师、智能油气田研究所副所长
机器学习辅助的油藏模型多相渗流升尺度
- 14:25-14:50 羊争鸣 美国Aera 能源公司（壳牌与埃克森美孚加州合资公司）资深油藏工程师、博士
流量试井及驱替特征解模型用于分析油田生产数据以预测诊断和优化生产动态
- 14:50-15:15 张元凯 贝克休斯（中国）油田技术服务有限公司 自动定向钻井中国首席专家
钻井作业数字化与自动化
- 15:15-15:40 白志宏 中国石油集团东方地球物理公司采集技术中心二级工程师
基于地物特征的智能识别技术在地震勘探采集施工的应用
- 15:40-16:05 孙志峰 山东石油化工学院油气工程学院副教授
陡坡带砂砾岩储层地震构型特征
- 16:05-16:20 休息

下半场主持人：于强 长安大学地球科学与资源学院石油系主任、智慧油气田研究院副院长

- 16:20-16:45 肖聪 中国石油大学（北京）石油工程学院讲师
基于深度学习代理模型的油藏自动历史拟合算法研究
- 16:45-17:10 陈小安 中国石油测井有限公司辽河分公司方法研究所高级工程师
光纤传感测井技术在数字油田的应用前景分析
- 17:10-17:35 王长江 中国石油集团测井有限公司测井地质研究院高级工程师
三塘湖盆地致密油储层孔隙结构测井评价

会议议程

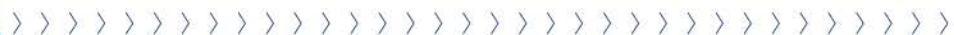
- 10:55-11:20 袁晓鹏 中国石油化工股份有限公司胜利油田分公司胜利采油厂
首席专家、高级工程师
集输泵站数字化管控平台建设及应用前景
- 11:20-11:40 李烜 中国石油化工股份有限公司胜利油田分公司孤岛采油厂
高级主管
生产信息化智能运维系统建设与应用
- 11:40-12:00 蒋铭 中国电信研究院接入网研究中心主任
F5G和云网融合助力石油行业数字化转型
- 12:00-14:00 午餐（西安用餐：万谛美途酒店院内一楼大厅）
（东营用餐：胜利宾馆餐厅）

下午 第五单元 塔里木智能油气田建设与数字化转型

上半场主持人：宋先知 中国石油大学（北京）油气资源与探测国家重点实验室常务副主任、碳中和示范性能源学院执行院长

- 14:00-14:25 李荣 阿布扎比国家石油公司数字油田专家
阿布扎比国油数字化案例应用探讨
- 14:25-14:50 佻米力江·吐尔洪 中国石油天然气股份有限公司塔里木油田分公司英买油气开发部地面工艺部仪表自动化岗
信息化在油气田生产调度的应用
- 14:50-15:15 张春生 中国石油天然气股份有限公司塔里木油田分公司油气工程研究院信息自动化室主任、二级工程师/副高级
气田智能化建设探索
- 15:15-15:40 白秋燕 中国石油天然气股份有限公司塔里木油田分公司勘探开发研究院规划信息所数据信息二级工程师（高级工程师）
油气田生产数据质量控制体系建设及应用研究
- 15:40-16:05 何骁勇 中海油研究总院有限责任公司
仪控资深工程师
海上智能油气田发展现状及趋势
- 16:05-16:15 休息

会议议程



第三天 2021年11月5日 星期五

上午 第六单元 大数据与人工智能应用

上半场主持人：梁积伟 长安大学地球科学与资源学院副教授

08:30-08:55 窦宏恩 中国石油天然气集团有限公司勘探开发研究院教授级高级工程师
油气行业人工智能发展面临的挑战对策与前景

08:55-09:20 何岩峰 常州大学国际交流处处长、港澳台事务办公室主任、海外教育学院院长
基于深度学习的油井工况智能监测技术与应用

09:20-09:40 宋先知 中国石油大学（北京）油气资源与探测国家重点实验室常务副主任、
碳中和示范性能源学院执行院长
钻完井人工智能场景及研究进展

09:40-10:00 金戈 美国科罗拉多矿业大学副教授
基于分布式光纤传感的水平井压裂临井应变检测

10:00-10:20 顾岱鸿 中国石油大学（北京）石油工程学院副教授，教育部气体能源工程
研究与利用中心副主任
气井全生命周期生产智能控制装置研制与现场应用

10:20-10:30 休息

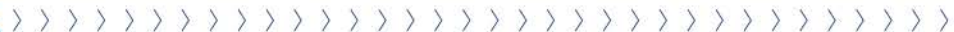
下半场主持人：侯朝晖，中国石油化工股份有限公司西北油田分公司信息化和档案管理中心副总、副研究馆员

10:30-10:55 郑栋宇 成都理工大学沉积地质研究院副研究员
基于测井大数据的页岩油气藏总有机碳深度学习预测

10:55-11:20 徐建春 中国石油大学（华东）石油工程学院副教授
随机单纯形近似梯度（StoSAG）算法理论及在油藏智能优化中的运用

11:20-11:40 白宗文 延安大学物理与电子信息学院副院长、陕西省能源大数据智能处理重
点实验室副主任
基于人工智能的智慧油田系统

会议议程



下半场 论文表彰仪式 共同宣言 闭幕式

- 16:30-16:40 优秀论文表彰仪式
主持人：付国民 教授
优秀会议论文获奖名单宣布 宣读人：甄延忠院长
- 16:40-16:50 宣读共识文件：《东营宣言》
主持人与宣读人：段鸿杰经理
- 16:50-17:00 大会总结与闭幕（总结人：高志亮首席专家）

会议结束 晚安

1、会务组办公室

本届会议，两地各设会务组：

- 西安市长安大学本部学术交流中心一楼
- 东营市胜利宾馆

具体事务可随时电话咨询：

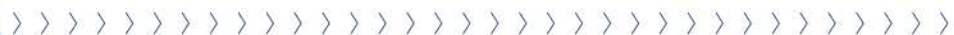
- 1) 胜利油田报告和参会联系人：申浩，手机：18654602105；
- 2) 赞助商及国外事务协调人：李媛，手机：13572518041；
- 3) 会议费发票联系人：张锐，手机，13384993967；
- 4) 展商代表联系人：于海明，手机，15006520258；
- 5) 线下会场布置与协调联系人：陶倩，手机，13759894341；
- 6) 酒店预定联系人：薛慧，手机：13709240709；
- 7) 会议演讲PPT收集及资料拷贝联系人：屈兴勃，手机，17791029870；
- 8) 报销用会议通知及参会证明等事务联系人：王颖，手机，18809219527；
- 9) 会议组委会邮箱：shuziyoutian@163.com；
- 10) 微信公众号：shuziyoutian；
- 11) 会议文件查询下载网址：<http://dosfiac.chd.edu.cn>。

2、会议签到

会议签到地点：线上Zoom客户端

签到形式：互动式视频会议

注意：签到时，请出示转款凭证以便组委会核对账务和开票信息。签到结束后可进行Zoom会议各项功能测试。



3、疫情管控要求

本次会议进行全方位防疫管理，要求如下：

- 1) 佩戴口罩
- 2) 扫描西安市一码通
- 3) 扫描通信大数据行程码
- 4) 测量体温、出示14天个人体温健康监测表
- 5) 48小时内的核酸检测阴性报告
- 6) 进入会场间隔就坐

4、住宿说明与安排

本次是线上会议，但是会议直播现场仍邀请到少量的嘉宾莅临会场，组委会预定了西安的万蒂美途酒店（长安大学本部西门外往北约300米处院内）和东营的胜利宾馆，如需住宿，请联系组委会进行预定。

5、同声传译

为了保障国内外参会代表的无障碍交流，本次会议全程配备线上同声传译，需要借助翻译观看国外报告的代表，请在Zoom客户端窗口的下方选择“传译”里面的“中文”再选择“将原始音频静音”即可听到译员的翻译声音，国外报告结束后选择“将原始音频解除静音”即可听到中国报告人的原声。在直播平台上观看的代表，可直接选择“中文频道”或者“English Channel”。

6、票务

所有会议服务费都含税，相关费用发票可在会议前或会议后同会务组联系索取，会期缴费的发票会后统一开出并快递。

第七届数字油田国际学术会议 论文评奖标准与办法

(讨论稿)

一、评选意义

教育部在对第七届数字油田国际学术会议的批复中强调按“以我为主，为我所用”的原则认真审核中外与会论文。

数字油田是企业或者石油石化领域发展中的一个重大工程，在数字油田的牵引下，使油田企业信息化、数字化、智能化迈入了新的阶段，为油田企业实现现代化做出了突出的贡献。

二十年来，数字油田领域的学者、专家们不忘初心，坚持探索，不断研究，各种平台上不断涌现出创新性的思想观点、优秀的研究成果。所以，随着新时代的数字油田建设与发展，加强对数字油田各项研究成果的评选、评奖，有利于遴选出更多的优秀成果推荐给大家学习与交流；有利于推进数字油田的深入探索与研究；有利于壮大数字油田研究队伍，有利于数字油田转型发展，有利于培育油田数据科学人才。

总之，目的就是为了推动数字油田快速发展，提高油气从业者的幸福感。

二、评选办法与原则

- (1) 2021年11月1日下午评奖委员会通过Zoom网络客户端召开论文评奖会；
- (2) 论文评选范围，以本次会议论文集发表的论文为准；
- (3) 论文评选由论文评审小组评选。评选要坚持公正、公平、公开原则，不徇私情，如遴选的评选论文作者是学术委员本人或者委员学生、本单位学者，请自动回避。评选要坚持择优、宁缺毋滥的原则；
- (4) 论文以得分高低排序进入提名环节，由评奖委员会评选出获奖论文。论文总分计算方法：总分=投票所得票数*40%+委员会打分*60%。
- (5) 论文评选分为四个等级：一等奖、二等奖、三等奖、优秀奖。
一等奖：原创；提出了相应的原理、定理、定义、理念和模型等，虽有一定的争议，但属于数字油田的创新理论与技术成果；

会议疫情防控方案

为做好本次会议新冠病毒防控工作，保障参会人员及工作人员在会前及会议期间身体状况正常，确保会议顺利召开，制定本工作方案。

一、会前防控措施

(一) 会前健康申报

- 1、所有参会代表及工作人员均须在会前登录通信大数据行程卡程序，依法如实进行14天内到达或途径地域的申报。
- 2、参会代表在报到时需主动提供会前14天体温自我监测登记表、健康情况声明书，并出示西安健康码。
- 3、通信大数据行程卡与健康码均为绿码者方可参加会议。经审查，健康申报情况有异常的，不得参加会议。

(二) 会场准备

- 1、会议举办前对会场、签到区等相关场所严格做好通风消毒工作，并在会场入口配备测温设备、口罩、消毒液、洗手液、酒精等相关疫情防控物资。
- 2、会场设置临时隔离点。临时隔离点设于相对独立区域，与会场不在同一楼栋或同一楼层，尽可能保持间隔距离，避免人员交叉。临时隔离点内配备必要的个人防护用品、清洁卫生设施、消毒药械，产生的垃圾按照医疗废物处置。

二、会议期间防控措施

(一) 会场要求

- 1、在会场入口设置体温检测岗，进行人工测温并做好疫情防控登记。接受测温时须有序进行，严格控制人员之间的安全距离。
- 2、实行分时分批组织参会人员进场退场，所有人员进入会场时实行“验码+测温”，体温正常且持健康码绿码者方可进入。
- 3、会场内座位的摆放尽量增加间距或隔位坐人。参会人员需全程佩戴口罩，休息期间尽量避免长时间交谈，近距离接触时也应佩戴口罩。所有工作人员在会议服务期间均需佩戴口罩。
- 4、在日常消毒工作基础上，会议期间对电梯、电梯按钮、扶手、会场桌椅、公共休息区内重点部位进行1天2次清洁消毒，确保会场正常使用，加强开窗通风换气，必要时通过机械方式加强通风。



The 7th Digital Oil Field International Academic Conference

DOFIAC 2021

2021 Science and Technology Exchange Project on International, Cross-strait, Hong Kong and Macao of Shaanxi Association for Science and Technology

Digital Transformation Upgrading and Intelligent Oil Gas Field Construction

3-5 November, 2021

CONFERENCE BOARD



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Yang LI, Gensheng LI

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Members of foreign nationality: Ahmad Shammari, Patrick David Bangert, Zhengming YANG

CONTENT |



■ CONFERENCE SUMMARY.....	01
■ CONFERENCE TIMETABLE.....	03
■ CONFERENCE AGENDA.....	05

■ CONFERENCE NOTICE..... 15

■ APPENDIX..... 18



CONFERENCE SUMMARY



■ 1. Conference Tenet

Build a platform for a contest of ideas and academic exchange to global scholars and insiders in the area of digital oilfield; Create the atmosphere for technologies and products innovation, digital transformation upgrading and intelligent oil gas field construction.

■ 2. Theme

Digital Transformation Upgrading and Intelligent Oil Gas Field Construction

■ 3. Topics

Industrial Internet Cloud Platform

Digital Exploration and Logging

Intelligent Application of Oil and Gas Production Information

Intelligent Oil Gas Field Construction of CNPC Tarim Oilfield Company

Big Data and Artificial Intelligence Applications

Intelligent Engineering and Talent Cultivation

■ 4. Organizers

Guidance Organizations:

Ministry of Education of the People's Republic of China

Ministry of Industry and Information Technology of the P.R.C

National Energy Administration

China Geological Survey

Chinese Petroleum Society

CNPC

SINOPEC

CNOOC

Shaanxi Yanchang Petroleum



Sponsors:

Chang'an University
SINOPEC Shengli Oilfield Company
Shaanxi Association for Science and Technology
Shaanxi Petroleum Society
Yan'an University

Undertakers:

Research Institute on Wisdom Oil & Gas Field, Chang'an University
Information Management Center of SINOPEC Shengli Oilfield Company
Xi'an Guilong Digital Engineering Science & Technology Co., LTD
Xi'an Data Source Software Co., Ltd
Xi'an Judian Services Association., Ltd

Co-Organizers:

Institute of Science, Chang'an University
Office of International Cooperation & Exchange, Chang'an University
Chang'an University Science Park
School of Earth Science and Resources, Chang'an University
China Academic Journals (CD Edition) Electronic Publishing House Co., Ltd

■ 5. Conference Venue

Virtual Venue: Zoom Client for Meetings (Meeting ID: 862 4489 2167)
(Zoom download link: <https://www.zoom.us/download>)

Venue: Conference Hall, 1F, Exchange Center, Chang'an University, Middle-section of Nan'er Huan Road, Xi'an, China
Room No.111 (Video Meeting Room), B Section, 1F, 1# Building, Shengli Hotel, Xisi Road, Dongying District, Dongying, China

■ 6. Dining Venue

Wonders Meto Hotel, Wenyi South Road, Xi'an, China (300 meters north to the west gate of the headquarters of Chang'an University)
Shengli Hotel (Xisi Road, Dongying District, Dongying, China)

CONFERENCE TIMETABLE



1st November, 2021

09:00-18:00 A whole day for registration online (Zoom Client for Meetings)

15:00-17:00 All-around Review Papers for Excellent Paper Winners
(Zoom Client for Meetings)

2nd November, 2021

09:00-18:00 Online Test in Zoom

First day 3rd November, 2021 Wednesday

A.M. Opening Ceremony & Keynote Speech

08:00-08:10 Delegates Entering

08:10-08:20 Conference Interpretation

08:20-08:30 Welcome Leaders and Guests

08:30-09:30 Opening Ceremony, Guest's Introduction and Leader Speech

09:30-09:40 Monograph Launching and Donation Ceremony

09:40-09:50 Group Photographing

09:50-10:00 Break

10:00-12:00 Unit 1 Keynote Speeches

12:00-14:00 Lunch

(Xi'an: 1F Wonder Meto Hotel; Dongying: Restaurant of Shengli Hotel)

P.M. Unit 2-3 Two Parallel Panel Sessions

Unit 2 Industrial Internet Cloud Platform

14:00-16:05 Presentations

16:05-16:20 Break

16:20-18:00 Presentations

Unit 3 Digital Exploration and Logging

14:00-16:05 Presentations

16:05-16:20 Break

16:20-18:00 Presentations

18:00-20:00 Dinner (Xi'an: 1F Wonder Meto Hotel)



Second day 4th November, 2021 Thursday

A.M. Unit 4 Intelligent Application of Oil and Gas Production Information

08:30-10:10 Presentations

10:10-10:30 Break

10:30-12:00 Presentations

12:00-14:00 Lunch

(Xi'an: 1F Wonder Meto Hotel; Dongying: Restaurant of Shengli Hotel)

P.M. Unit 5 Intelligent Oil Gas Field Construction of CNPC Tarim Oilfield Company

14:00-16:05 Presentations

16:05-16:15 Break

16:15-18:00 Presentations

18:00-20:00 Dinner (Xi'an: 1F Wonder Meto Hotel)

Third day 5th November, 2021 Friday

A.M. Unit 6 Big Data and Artificial Intelligence Applications

08:30-10:20 Presentations

10:20-10:30 Break

10:30-12:00 Presentations

12:00-14:00 Lunch

(Xi'an :1F Wonder Meto Hotel; Dongying: Restaurant of Shengli Hotel)

P.M. First Half Unit 7 Intelligent Engineering and Talent Cultivation

14:00-16:25 Presentations

16:25-16:30 Break

P.M. Second Half Commendation for Excellent Papers Winners and Closing Ceremony

16:30-16:40 Release Excellent Paper Winners List

16:40-16:50 Read off "The Declaration of Dongying"

16:50-17:00 Conference Summary and Closing Ceremony

End

Note: Conference agenda contains 7 units, please control the duration time of your presentation, thank you for your cooperation!

CONFERENCE AGENDA



First day 3rd November, 2021 Wednesday

A.M. Opening Ceremony & Keynote Speech

- 08:00-08:10 Delegates Entering
(Zoom Client for Meetings for most of online delegates; Conference Hall, 1F Exchange Center, Chang'an University for Xi'an Delegates; Shengli Hotel Video Meeting Room for Dongying Delegates)
- 08:10-08:20 Conference Interpretation by Prof.Guomin FU(Conference Executive Head)
- 08:20-08:30 Welcome Leaders and Guests of Online and Conference Site
- 08:30-09:30 Opening Ceremony, Introductions of Honored Guests and Organizer's Welcoming Speech
Moderator: Ling HAN, Doctoral Supervision, Deputy Dean, Institute of Science, Chang'an University
1. Introduce the Honored Guest One by One
 2. Shuanhai HE, Vice-chancellor at Chang'an University
 3. Xiaowei NIE, Deputy General Manager, SINOPEC Shengli Oilfield Company
 4. Junhua ZHANG, CO-chair, Shaanxi Association for Science and Technology
 5. Xinyun ZHANG, General Secretary at Shaanxi Petroleum Society
 6. Huwa TAN, Vice-chancellor at Yan'an University
- 09:30-09:40 Monograph Launching and Donation Ceremony for "Digital Oilfield in China—Wisdom Oil and Gas Field Construction"
Moderator: Prof. Jian'gang JIAO (Vice Dean, School of Earth Science and Resources, Chang'an University)
- 09:40-09:50 Group Photographing
(Xi'an: Outside of Exchange Center, Headquarters of Chang'an University; Dongying: Outside of 1# Building, Shengli Hotel)
- 09:50-10:00 Break

CONFERENCE AGENDA



- 14:50-15:15 Yu CAO, Deputy Director, Senior Engineer of Planning Information Institute, RIPED of CNPC Tarim Oilfield Company
Construction Practice of Exploration and Development Collaborative Research Platform Based on Dream Cloud
- 15:15-15:40 Ke LIN, Technical Director of Hangzhou Harmony Cloud Technology Co., LTD
Cloud Native Technology Applied in Petrochemical Industry
- 15:40-16:05 Zichao YUAN, Netease Cloud Native Solution Expert of Netease Hangzhou Research Institute
Netease Digital System Construction Based on Cloud Native
- 16:05-16:20 Break

Moderator: Shaoqiang BING, Cloud Service Expert, SINOPEC Shengli Oilfield Company

- 16:20-16:45 Weidong CHEN, Deputy Manager of Information Center of Dongsheng Company, SINOPEC Shengli Oilfield Company
Visual Dynamic Monitoring Technology of Reservoir Development Based on Configuration
- 16:45-17:10 Yan WU, System Assistant Engineer, Software Operation and Maintenance Center, Tuha Oilfield Information Technology Company, PetroChina
Application of Geographic Information System in Tuha Oilfield
- 17:10-17:35 David LEE, Director, Planning Institute for Global Oil and Gas Resources and Exploration, RIPED, PetroChina
Development and Sharing of Global Oil and Gas Resource Information System
- 17:35-18:00 Zhiyuan LI, Senior Architect, Alibaba Cloud Co., Ltd
Data Intelligence Drives Enterprise Digital Transformation

P.M. Unit 3 Digital Exploration and Logging

Moderator: Hong'en DOU, Professor-level Senior Engineer, RIPED, PetroChina



- 14:00-14:25 Hangyu LI, Doctoral Supervisor, Professor at School of Petroleum Engineering, Deputy Director of Intelligent Oil and Gas Field Research Institute, China University of Petroleum (China East)
Upscaling Method of Multiphase Seepage with Machine Learning in Reservoir Models
- 14:25-14:50 Zhengming YANG, Senior Reservoir Engineer, Aera Energy LLC
Field Production Data Are Analyzed with RTA(Rate Transient Analysis) and Waterflood Analytical Models to Diagnose, Predict and Optimize Production Performance
- 14:50-15:15 Yuankai ZHANG, Chief Expert of Automatic Directional Drilling, Baker Hughes (China) Oilfield Technology Services Co., Ltd
Digitization and Automation of Drilling Operations
- 15:15-15:40 Zhihong BAI, Second-level Engineer, Acquisition Technology Center, BGP INC., CNPC
Application of Intelligent Recognition Technology Based on Ground Feature in Seismic Exploration Acquisition Construction
- 15:40-16:05 Zhifeng SUN, Associate Professor, Shengli College, China University of Petroleum (Shandong Institute of Petrochemical Technology)
Seismic Configuration Characteristics of Conglomerate Reservoir in Steep Slope Zone
- 16:05-16:20 Break

- Moderator: Qiang YU, Associate Professor, Director of Petroleum Department, School of Earth Science and Resources, Chang'an University
- 16:20-16:45 Cong XIAO, Lecturer, School of Petroleum Engineering, China University of Petroleum (Beijing)
Research on Automatic Reservoir History Fitting Method based on Deep Learning Proxy Model
- 16:45-17:10 Xiao'an CHEN, Senior Engineer, Method Research Institute, Liaohe Branch of China Petroleum Logging Co., LTD
Application Prospect Analysis of Optical Fiber Sensing Logging Technology in Digital Oilfield

CONFERENCE AGENDA



- 17:10-17:35 Changjiang WANG, Senior Engineer, Research Institute of Logging Geology, CNPC Logging Co., Ltd.
Logging Evaluation on Pore Structure of Tight Oil Reservoir in Santanghu Basin
- 17:35-18:00 Qiyu WU, Lecturer, School of Earth Science and Technology, China University of Petroleum (East China)
Construction and Application of Digital Core in Unconventional Oil and Gas Reservoirs
- 18:00-20:00 Dinner (Xi'an:1F Meto Hotel)

Second day 4th November, 2021 Thursday

A.M. Unit 4 Intelligent Application of Oil and Gas Production Information
Moderator: Zhiqiang ZHANG, Deputy Director of Information Management Center, SINOPEC Shengli Oilfield Company

- 08:30-08:55 Hua GUO, Professor-level Engineer, Aerogeophysical Remote Sensing Center for Natural Resources, China Geological Survey
Aeromagnetic Gradiometer Applied in Underground Pipeline Detection
- 08:55-09:20 Shu LIU, Director Engineer, Business Development Department, Research Institute of Industrial Internet and Internet of Things, China Academy of Information and Communications Technology
The Application of Industrial Internet Identification Enables Integrated and Innovative development
- 09:20-09:45 Guofang WANG, Deputy Manager, Senior Engineer, Deputy Manager of Information Service Center at Gudao Oil Production Plant of SINOPEC Shengli Oilfield Company
Intelligent Dynamic Analysis and Business Collaboration of New Oil Production Management Area
- 09:45-10:10 Xin XU, Deputy General Manager, Senior Engineer, FiberHome Hsiang Yun Network Technology Co., Ltd
Edge Computing Unit Applied in Industrial Internet
- 10:10-10:30 Break



Moderator: Quan CAI, Expert for Production Information Operation, SINOPEC Shengli Oilfield Company

- 10:30-10:55 Liansheng DENG, Solution Manager, Shandong Industry & Intelligence Union Technology Co., Ltd
Software Definition Technology for Industrial Equipment
- 10:55-11:20 Xiaopeng YUAN, Senior Engineer, Shengli Oil Production Plant of SINOPEC Shengli Oilfield
Construction and Application Prospect of Digital Control Platform of Gathering Pump Station
- 11:20-11:40 Xuan LI, Senior Executive, Gudao Oil Production Plant of SINOPEC Shengli Oilfield Company
Construction and Application of Production Information Intelligent Operation and Maintenance System
- 11:40-12:00 Ming JIANG, Director of Access Network Research Center, China Telecom
F5G and Cloud Network Integration Enables Digital Transformation for Oil Industry
- 12:00-14:00 Lunch (Xi'an: 1F Wonder Meto Hotel; Dongying: Restaurant of Shengli Hotel)

P.M. Unit 5 Intelligent Oil Gas Field Construction of CNPC Tarim Oilfield Company and Digital Transformation

Moderator: Xianzhi SONG, Deputy Director of State Key Laboratory of Oil and Gas Resources and Exploration, Dean at School of Carbon Neutral Demonstration Energy, China University of Petroleum (Beijing)

- 14:00-14:25 Rong LI, Digital oilfield expert, ADNOC
Discussion on Digital Oilfield Case Application in ADNOC
- 14:25-14:50 KaMiLiJiang TuErHong, Instrumentation Automation Engineer,
Yingmai Oil Gas Development Department, CNPC Tarim Oilfield Company
Application of Infomationization in Oil and Gas Fields Production Scheduling

CONFERENCE AGENDA



- 14:50-15:15 Chunsheng ZHANG, Secondary Engineer, Senior Engineer, Director of Information Automation Office, Oil and Gas Engineering Research Institute of CNPC Tarim Oilfield Company
Exploration on Intelligent Construction of Gas Field
- 15:15-15:40 Qiuyan BAI, Senior Engineer for Data Information, Research Institute of Exploration and Development, CNPC Tarim Oilfield
System Construction and Application Research of Production Data Quality Control of Oil and Gas Field
- 15:40-16:05 Xiaoyong HE, Senior Engineer for Instrument Control, CNOOC Research Institute Co., LTD
Development Status and Trends of Offshore Intelligent Oil and Gas Fields
- 16:05-16:15 Break

Moderator: Rong LI, Digital oilfield expert, ADNOC

- 16:15-16:40 Ahmad Shammari, "Product Champion" for the Multiphase Flow Simulator, Schlumberger (Norway)
Energy Transition Challenges and the Future of Petroleum Industry
- 16:40-17:00 Sadik Noman, Head of Digital Transformation and IT Projects, South Asia Zone, Chevron Bangladesh
Digitization and Digital Transformation of the Oil and Gas Industry
- 17:00-17:20 Fang CHEN, Senior Engineer, Digital Reservoir Center, Exploration and Development Research Institute, Changqing Oilfield Company, PetroChina
Intelligent Oil and Gas Reservoir Construction in Changqing Oilfield
- 17:20-17:40 Ying XU, Senior Consultant for Oil and Gas Industry, Rockwell Automation (China) Company Limited
Smart Oil/Gas Field Architecture & Practices Based on Idea of IIoT
- 17:40-18:00 Xinyu HU, Assistant Engineer of Automation, Dina Oil Gas Development Department, CNPC Tarim Oilfield Company
Practice and Discussion of Unmanned Routing Inspection Technology in Operation and Maintenance Mode of Oil and Gas Processing Station
- 18:00-20:00 Dinner (Xi'an: 1F Wonder Meto Hotel)

CONFERENCE AGENDA



- 10:55-11:20 Jianchun XU, Association Professor, School of Petroleum Engineering, China University of Petroleum (East China)
Stochastic Simplex Approximate Gradient (StoSAG) Algorithm Theory and Its Application in Reservoir Intelligent Optimization
- 11:20-11:40 Zongwen BAI, Deputy Dean at School of Physics and Electronic Information, Yan'an University; Deputy Director of Shaanxi Key Laboratory of Energy Big Data Intelligent Processing
Intelligent Electronic Scoreboard based on Speech Recognition
- 11:40-12:00 Dewei JI, Deputy Secretary of the Party Committee, Deputy Manager, Senior Engineer at Beijing Branch of Daqing Oilfield Information Technology Company
IPv6 Address Planning and Management Practice
- 12:00-14:00 Lunch (Xi'an: 1F Meto Hotel; Dongying: Restaurant of Shengli Hotel)

P.M. First Half Unit 7 Intelligent Engineering and Talent Cultivation

Moderator: Yanzhong ZHEN, Deputy Dean, School of Petroleum Engineering and Environmental Engineering, Yan'an University

- 14:00-14:25 Jingwu LU, Senior Engineer, Material Equipment Company of CNPC Logging Co., LTD
Research and Exploration of Intelligent Logging Instrument Maintenance Solution
- 14:25-14:50 Chang YOU, Senior Engineer, Instrument Repair and Equipment Center, Southwest Branch of CNPC Logging Co., Ltd.
Optimization Design of High-Temperature and High-Pressure Caliper Tool and Application in Complex Wells
- 14:50-15:15 Song DENG, Lecturer, School of Petroleum Engineering, Changzhou University
Real Time Prediction Method of Drilling Loss Based on Analogue Analysis
- 15:15-15:40 Jiwei LIANG, Association Professor, School of Earth Science and Resources, Chang'an University
Landslide Monitoring Applied in Early Warning for Oil and Gas Pipeline Deformation



- 15:40-16:05 Qiang YU, Director of Petroleum Department, School of Earth Science and Resources, Vice Dean at Research Institute on Wisdom Oil and Gas Field, Chang'an University
Inter-disciplinary Talent Cultivation for Intelligent Oil and Gas Field Construction
- 16:05-16:25 Yue CAI, Lecturer, College of Geology and Environment, Xi'an University of Science and Technology
Exploration and Consideration of Data Thinking in Geoscience Talent Cultivation
- 16:25-16:30 Break

P.M. Second Half Commendation for Excellent Papers Winners, The Declaration of Dongying and Closing Ceremony

- 16:30-16:40 Commendation for Excellent Papers Winners
Moderator: Prof. Guomin FU
The Reader of Excellent Papers Winners: Yanzhong ZHEN
- 16:40-16:50 Read off "The declaration of Dongying"
Reader: Hongjie DUAN
- 16:50-17:00 Conference Summary and Closing Ceremony(Prof.Zhiliang GAO)

End

CONFERENCE NOTICE



■ 1. Conference Affairs

Our conference affairs offices are arranged in three venues:

- 1) Online Virtual Venue: Zoom Client for Meetings
(download link: <https://www.zoom.us/download>, Meeting ID:862 4489 2167)
- 2) Offline Venue Place 1: Conference Hall, 1F, Exchange Center, Chang'an University,
Middle-section of Nan'er Huan Road, Xi'an, China
- 3) Offline Venue Place 2: Room No.111 (Video Meeting Room), B Section, 1F, 1# Building,
Shengli Hotel, Xisi Road, Dongying District, Dongying, China

Contact Persons:

Tracy Lee for agenda and presentation, Mobile: 86 (0) 13572518041;

Aimee MA for certification, Mobile: 86 (0) 17344387881;

E-mail: shuziyoutian@163.com;

Conference documents download URL: <http://dosfiac.chd.edu.cn>

■ 2. Conference Registration

- 1) Fill in the DOFIAC2021 registration form, wire the registration fee at first, and then send back the registration form with bank voucher to DOFIAC2021 committee for obtaining the meeting ID and passwords or invited link.
- 2) Please input the meeting ID and passwords which provided by DOFIAC2021 committee to enter into DOFIAC2021 Zoom Virtual Venue, and wait for conference host approval until you are admitted to the meeting room.
- 3) If you join meeting by PC or laptop, Please select option of "Always show video preview dialog" when joining a video meeting, and click the button of "Join with Video". If you join by mobile, please click "Call over Internet".
- 4) When you wait, please Test Computer Audio.
- 5) When you enter into DOFIAC2021 Virtual Venue, please click the button of "Unmute" and "Start Video" at the bottom left corner of screen, if not, we will send request for these orders, please agree.



■ 3. Simultaneous Interpretation Service

In order to provide a barrier-free platform for communication, simultaneous interpretation is provided for the conference. When you view Chinese presentation, please open the “interpretation” select “English” at the bottom of screen, and click “ Mute Original Audio”; When you view presentation of Chinese, Please open the “interpretation” select “Chinese” at the bottom of screen, and click “Mute Original Audio”, you can hear the translation content. If you don’t need translation, please click “Unmute Original Audio”, so you can hear the speaker’s original audio. If you watch the conference in live-broadcasting platform, you can free select “Chinese Channel” or “English Channel”.

■ 4. Invoice

About the expense reimbursement voucher/invoice, please contact committee to obtain if you paid the registration fees in advance.

■ 5. Catering and Service

- 1) If there are special needs, such as Muslim or ethnic minorities, please be sure to inform committee in advance;
- 2) Please pay attention to the time and place for conference relative meals arrangement, also obey the rules of the hotel, and show the meal voucher and delegate’s hang-tag;
- 3) Committee will not prepare the conference material, food and accommodation for any unregistered delegate;
- 4) The detailed dining arrangements for this conference:

Dining venue: 1F, Wonders Meto Hotel (Wenyi South Road, Xi’an, China)

Hotel	Meal	Mealtime
Wonders Meto Hotel	Lunch	12:00-14:00
	Dinner	18:00-20:00

CONFERENCE NOTICE



■ 6. Safety and Health

- 1) For your health and safety, please scan Xi'an QR Code Pass and big data travel QR code before entering the venue. Take personal protection, wear masks, and sit apart in the venue as well as avoid gathering communication.
- 2) The conference offline venue is Conference Hall, Exchange Center, headquarters of Chang'an University, Middle-section of Nan'er Huan Road, Xi'an, China.
- 3) Wonders Meto Hotel is located 300 meters north to the west gate of the headquarters of Chang'an University. Please give phone-call (86-29-86680000) to hotel if you would like to have meals.
- 4) During the conference, in case of sudden events, do not panic, please listen to the hotel unified command and orderly evacuation, please draw your attention to the location of the security gate.
- 5) In case of sudden event when you are out of hotel, please contact with conference committee in time for the fastest help.
- 6) The weather is getting cold in November of Xi'an, please be sure to add clothes to keep warm.
- 7) Safety is first when you go sightseeing, please wear surgical mask and obey the traffic rules when crossing the road, bless you will enjoying in participation of DOFIAC2021.

The 7th Digital Oil Field International Academic Conference Criteria and Method of Paper Awards

1. Significance

The Ministry of Education of the People's Republic of China emphasized the principle of "self-centered and self-used" in the rescriptum on The 7th Digital Oil Field International Academic Conference to Chang'an University.

Digital Oilfield is a major engineering in the development of oil field companies or petroleum and petrochemical industry. Under the traction of digital oil field, it makes oil field enterprises enter a new stage of informatization, digitalization and intelligentization, and makes outstanding contributions to the modernization of oil field enterprises.

In the past 20 years, scholars and experts in the area of digital oil field have been keeping their original ideas in mind, insisting on exploration and continuous research. New innovation ideas and outstanding research achievements were emerged on many platforms. Therefore, with the construction and development of digital oil field in the new era, and also enhancing the appraise and elect for types of research achievement in digital oilfield, it is workable for selecting more outstanding achievements and recommend them to everyone for learning and exchanging, it is helpful to promote exploration and research the digital oil field deeply, it is also beneficial to cultivate and encourage the growth and increasing of the research team on digital oil fields as well as making the emergence and growth of oilfield data scientists.

In a word, the purpose is to promote the rapid development of digital oilfield with more high-level research papers.

2. Methods and Principles of Appraisal Award

- 1) Advisory Group Meeting for Paper Prizes will be held through Zoom on 1 November, 2021;
- 2) Appraisal scope: Based on the papers which were published in proceedings of DOFIAC2021;
- 3) Appraisal and elect of paper awards shall be conducted by the DOFIAC2021 Academic Committee with the principles of fairness, impartial and openness. For example, the advisory group member should actively apply for withdrawal if the winner of the paper prizes is an member of academic committee, student or a colleague of advisory committee. The principle of appraisal should be adhered to select the best and put quality before quantity;

- 4) The paper is entered into the nomination process according to the score level, and the winning paper is selected by the advisory group. Total score calculation method:
Total score = votes×40% + advisory group score×60 %.
- 5) The papers prizes are divided into four levels: first prize, second prize, third prize and outstanding awards:
 - First prize: originality. The corresponding principles, theorems, definitions, concepts and models are proposed. Although there are certain controversies, they belong to the innovative theory and technical achievements of digital oil fields.
 - Second Prize: originality. The corresponding principles, theorems, definitions, concepts, or major solutions are proposed. They have a certain degree of recognition and reference in the academic community.
 - Third Prize: originality. Using the research results of others, practice and experience are summed up, and it has certain reference value and recognition to the construction of digital oil fields.
 - Excellence Award: originality. The author puts forward his own opinions on certain aspect or a certain concept, which has certain reference value for the research and construction of digital oil field.

3. Incentives

1) Criteria and Methods of Incentives

- First prize: RMB ¥1000.00 with honored certificate;
- Second prize: RMB ¥600.00 with honored certificate;
- Third prize: RMB ¥300.00 with honored certificate;
- Excellence awards: RMB ¥200.00 with honored certificate;

- 2) The Chinese and English papers were listed together, DOFIAC2021 committee is initially setting as 1 first prize, 2 second prizes, 5 third prizes, and 7 excellent prizes.
- 3) The outstanding papers will be recommended for publishing to Journal of Natural Gas Geoscience, Xi'an Shiyou University (Natural Science Edition), Journal of Earth Sciences and Environment and Well Logging Technology.
- 4) The winners of the excellent papers will be announced and awarded at the closing ceremony.



4. Assumption

- 1) To encourage the author to write the outstanding papers on digital oil field and persist for a long time. Even if the manuscript was not published in DOFIAC2021, it is necessary to establish a long-term mechanism, invite the experts to review, select out the outstanding papers and recommend to publish in core journals each year;
- 2) If the paper reaches a certain level, and the English manuscripts are up to 300 pages, we will connect with international famous press to publish the proceeding, it is possible to index in SCI or EI database;
- 3) Reward is a form of praise, and it is the key to moving the great enterprise of digital oil fields forward.

DOFIAC2021 Committee
30 October, 2021