

CGS / SEG

INTERNATIONAL GEOPHYSICAL CONFERENCE

Geophysical Challenges and Prosperous Development

地球物理机遇与挑战国际会议

QINGDAO • CHINA

17-20 APRIL 2017

Official Program

会议手册



Organizer :
主 办 :



Supporter :
承 办 :



中国石油大学 (华东)
CHINA UNIVERSITY OF PETROLEUM



ONSITE INSTRUCTION

参会须知

Onsite Registration

- Monday 17 April 13:00-18:00 1F Yifu Building
- Tuesday 18 April 08:00-17:00 1F Yifu Building
- Wednesday 19 April 08:00-17:00 1F Yifu Building
- Thursday 20 April 08:00-17:00 1F Yifu Building
(Registration and Sign-in are not available in hotel)

现场注册/报到日期及地点

- 4月17日，周一，13:00-18:00，逸夫楼一层
- 4月18日，周二，08:00-17:00，逸夫楼一层
- 4月19日，周三，08:00-17:00，逸夫楼一层
- 4月20日，周四，08:00-17:00，逸夫楼一层
(不在酒店办理注册和报到手续)

Locations for oral sessions

- Meeting Room No.1 – Yifu Main Hall, 2F Yifu Building
- Meeting Room No.2 – Yifu Lecture Room, 1F Yifu Building
- Meeting Room No.3 – R365, 3F Block-C Engineering Building
- Meeting Room No.4 – R367, 3F Block-C Engineering Building
- Meeting Room No.5 – R371, 3F Block-C Engineering Building
- Meeting Room No.6 – R375, 3F Block-C Engineering Building
- Meeting Room No.7 – R377, 3F Block-C Engineering Building
- Meeting Room No.8 – R757, 7F Block-C Engineering Building

Locations for poster sessions

2F Yifu Building

口头报告地点

- 会议室一：逸夫楼二层逸夫礼堂
- 会议室二：逸夫楼一层逸夫报告厅
- 会议室三：工科楼C座三层365
- 会议室四：工科楼C座三层367
- 会议室五：工科楼C座三层371
- 会议室六：工科楼C座三层375
- 会议室七：工科楼C座三层377
- 会议室八：工科楼C座七层757

张贴报告地点

逸夫楼二层

Speaker Ready Room

Please bring your presentation to the Speaker Ready Room where the working staff will assist you with uploading your presentation to the computers in the session rooms for your scheduled talk at least half a day in advance.

Location: Yifu Meeting Room, 1F Yifu Building

Available Time:

- Monday 17 April 13:00-18:00
- Tuesday 18 April 08:00-17:00
- Wednesday 19 April 08:00-17:00
- Thursday 20 April 08:00-17:00



报告准备间

报告准备间为报告演讲人和主持人提供相关的设备和技术服务。所有演讲人至少在演讲前半天到报告准备间拷贝论文多媒体。

地点：逸夫楼一层，逸夫会议室

时间：

- 4月17日，周一，13:00-18:00
- 4月18日，周二，08:00-17:00
- 4月19日，周三，08:00-17:00
- 4月20日，周四，08:00-17:00

Cafeteria Venue

The dining place of the buffet lunches & dinners are in 1F/2F International Training Centre, China University of Petroleum(East China), Meal coupons will be required.

For your convenience, please avoid the peak time for dining.

用餐地点

会议期间的自助午餐及晚餐地点：中国石油大学（华东）国际培训中心一层 / 二层

由于参会人数较多，请您尽量选择错峰就餐。

All participants must wear the name badges to attend all the sessions.

会议期间，所有参会代表须佩戴胸卡入场。

To respect the copyright of all the presentations, any forms of sound, camera or video recordings are not allowed during the sessions.

为尊重报告的版权，会议所有报告期间禁止任何形式的录音、摄像及录影。



IMPORTANT CONTACT INFORMATION

重要联络方式

Meeting Venues

Yifu Building and Block C Engineering Building, China University of Petroleum(East China)

Add: No. 66 Changjiang West Road, Huangdao District, Qingdao City, Shandong Province

Tel: +86-532 8698 1279

会议地点

中国石油大学（华东）逸夫楼、工科楼C座

- 地址：青岛市黄岛区 长江西路66号
- 电话：+86 532 8698 1279

Recommended Hotel

- Kangda Plaza Qingdao
Contact: Qingqing Yuan
Tel: + 86 532 5571 0888
+ 86 186 6331 7111

Email: eileen.yuan@hojochina.com

- Blue Horizon Hotel
Contact: Manman Ma
Tel: + 86 532 8698 6666
+ 86 186 7896 9905

Email: mamanman1990@163.com

- China University of Petroleum(East China)Training Center

Contact: Xinguang Dan

Tel: +86 13605460377

Email: danxg@upol.cn

推荐住宿酒店

- 青岛康大豪生大酒店

联系人：袁晴晴

电 话：+86 532 5571 0888

+86 186 6331 7111

电 邮：eileen.yuan@hojochina.com

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电 邮：danxg@upol.cn

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Kai Liang 梁锴

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VENUE LOCATION
会场位置

China University of Petroleum(East China)

Address: No. 66 Changjiang West Road, Huangdao District, Qingdao City, Shandong Province, China

Tel: 0086-532-86981279

Bus Station: "South gate of China University of Petroleum (East China)"

Bus Line from Qingdao Railway Station: Tunnel No.5/ No.6/ No.8

Bus Line from Qingdao Airport: Airport Bus Huangdao line

公交站名：石油大学南门

青岛火车站至石油大学：隧道5路/隧道6路/隧道8路

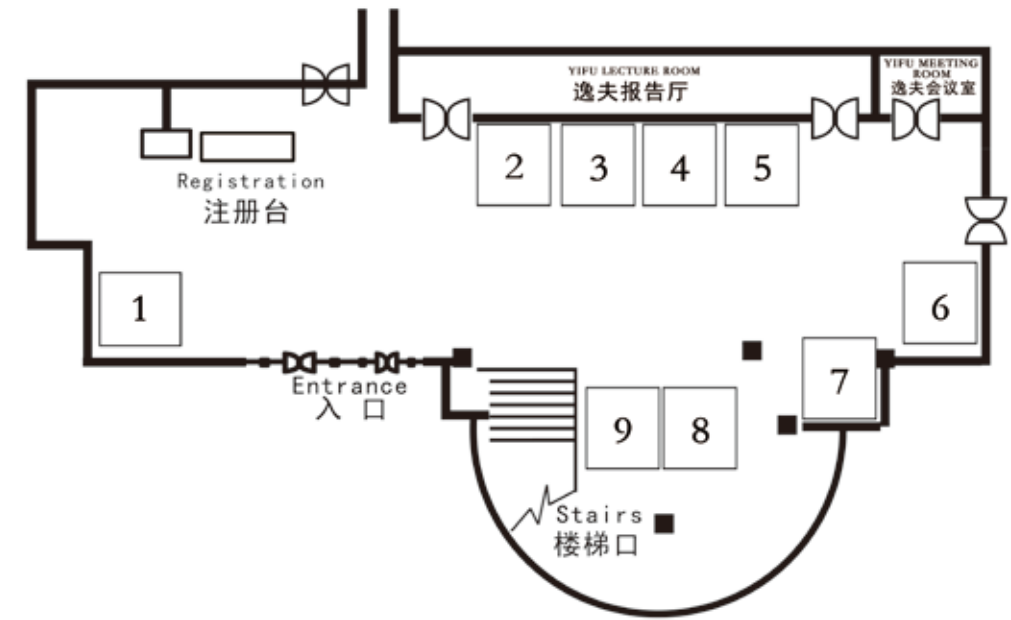
青岛机场至石油大学：机场巴士黄岛专线



MEETING ROOM FLOOR MAP
会议室平面图

1F YIFU Building

逸夫楼一层平面图



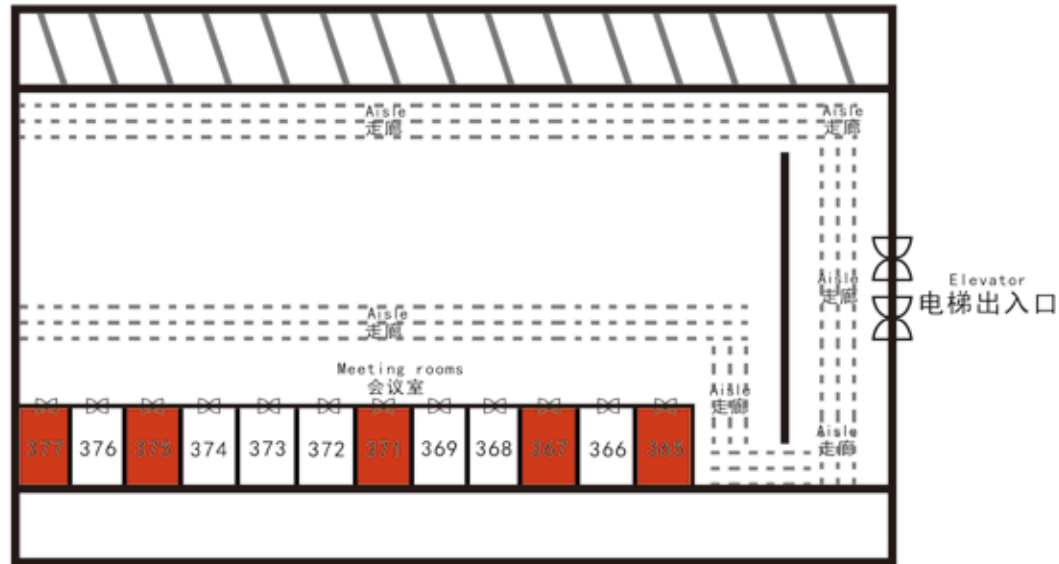
2F YIFU Building

逸夫楼二层平面图

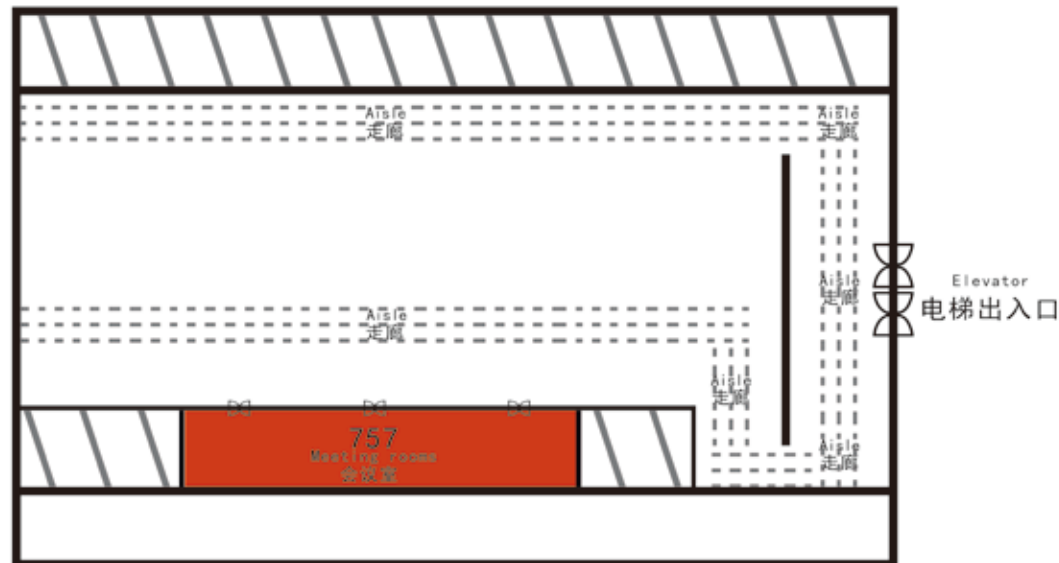




3F Block C Engineering Building
工科楼C座3层平面图



7F Block C Engineering Building
工科楼C座7层平面图



CONFERENCE OVERVIEW
大会概览

Monday, 17 April 2017

13:00-18:00.....*Onsite Registration*
17:00-17:30.....*Session Chair Meeting*

Wednesday, 19 April 2017

08:00-17:00.....*Onsite Registration*
08:30-16:50.....*Technical Sessions*

Tuesday, 18 April 2017

08:00-17:00.....*Onsite Registration*
08:00-08:10.....*Welcome Remarks*
08:10-16:50.....*Technical Sessions*

Tuesday, 20 April 2017

08:00-17:00.....*Onsite Registration*
08:30-16:50.....*Technical Sessions*
17:00-17:20.....*Conference Conclude*

CONFERENCE SCHEDULE
会议日程表

Date 日期	Time 时间	Events 活动内容	Venues 地点	
April 17, 2017 2017年4月17日	13:00-18:00	Onsite Registration 现场注册及报到	1F Yifu Building 逸夫楼一层	
April 18, 2017 2017年4月18日	08:00-10:10	Opening and Keynote Presentations 开幕式及特邀报告	Main Hall 2F Yifu Building 逸夫楼二层报告厅	
	10:10-10:30	Coffee Break 茶歇	1F Yifu Building 逸夫楼一层	
	10:30-12:10	Technical Sessions 分专题学术报告	1F/2F Yifu Building 逸夫楼一层/二层	3F/7F Block C Engineering Building 工科楼C座三层/七层
	12:10-13:30	Lunch 午餐	1F International Training Centre 国际培训中心一层	
	13:30-14:50	Technical Sessions 分专题学术报告	1F/2F Yifu Building 逸夫楼一层/二层	3F/7F Block C Engineering Building 工科楼C座三层/七层
	14:50-15:30	Coffee Break and Poster Session 1 茶歇和张贴报告一	1F/2F Yifu Building 逸夫楼一层/二层	
	15:30-16:50	Technical Sessions 分专题学术报告	1F/2F Yifu Building 逸夫楼一层/二层	3F/7F Block C Engineering Building 工科楼C座三层/七层
	17:20-18:30	Dinner 晚餐	1F International Training Centre 国际培训中心一层	
	08:30-17:20	Conference Exhibition 会议展览	1F Yifu Building 逸夫楼一层	



April 19, 2017 2017年4月19日	08:30-09:50	Technical Sessions 分专题学术报告	1F/2F Yifu Building 逸夫楼一层/二层	3F/7F Block C Engineering Building 工科楼C座三层/七层
	09:50-10:20	Coffee Break 茶歇	1F Yifu Building 逸夫楼一层	
	10:20-11:40	Technical Sessions 分专题学术报告	1F/2F Yifu Building 逸夫楼一层/二层	3F/7F Block C Engineering Building 工科楼C座三层/七层
	12:00-13:30	Lunch 午餐	1F International Training Centre 国际培训中心一层	
	13:30-14:50	Technical Sessions 分专题学术报告	1F/2F Yifu Building 逸夫楼一层/二层	3F/7F Block C Engineering Building 工科楼C座三层/七层
	14:50-15:30	Coffee Break and Poster Session 2 茶歇和张贴报告二	1F/2F Yifu Building 逸夫楼一层/二层	
	15:30-16:50	Technical Sessions 分专题学术报告	1F/2F Yifu Building 逸夫楼一层/二层	3F/7F Block C Engineering Building 工科楼C座三层/七层
	17:20-18:30	Dinner 晚餐	1F International Training Centre 国际培训中心一层	
April 20, 2017 2017年4月20日	08:30-17:20	Conference Exhibition 会议展览	1F Yifu Building 逸夫楼一层	
	08:30-09:50	Technical Sessions 分专题学术报告	1F/2F Yifu Building 逸夫楼一层/二层	3F/7F Block C Engineering Building 工科楼C座三层/七层
	09:50-10:20	Coffee Break 茶歇	1F Yifu Building 逸夫楼一层	
	10:20-11:40	Technical Sessions 分专题学术报告	1F/2F Yifu Building 逸夫楼一层/二层	3F/7F Block C Engineering Building 工科楼C座三层/七层
	12:00-13:30	Lunch 午餐	1F International Training Centre 国际培训中心一层	
	13:30-14:50	Technical Sessions 分专题学术报告	1F/2F Yifu Building 逸夫楼一层/二层	3F/7F Block C Engineering Building 工科楼C座三层/七层
	14:50-15:30	Coffee Break and Poster Session 3 茶歇和张贴报告三	1F/2F Yifu Building 逸夫楼一层/二层	
	15:30-16:50	Technical Sessions 分专题学术报告	1F/2F Yifu Building 逸夫楼一层/二层	3F/7F Block C Engineering Building 工科楼C座三层/七层
	17:00-17:20	Conference Conclude 闭幕式	Main Hall 2F Yifu Building 逸夫楼二层报告厅	
	17:20-18:30	Dinner 晚餐	1F International Training Centre 国际培训中心一层	
08:30-17:20	Conference Exhibition 会议展览	1F Yifu Building 逸夫楼一层		

Meeting Room Arrangement
会场安排

MEETING ROOM 1 会场1	MAIN HALL, 2F YIFU BUILDING 逸夫楼二层报告厅
MEETING ROOM 2 会场2	LECTURE ROOM, 1F YIFU BUILDING 逸夫楼一层报告厅
MEETING ROOM 3 会场3	R365, 3F BLOCK-C ENGINEERING BUILDING 工科楼C座三层365房间
MEETING ROOM 4 会场4	R367, 3F BLOCK-C ENGINEERING BUILDING 工科楼C座三层367房间
MEETING ROOM 5 会场5	R371, 3F BLOCK-C ENGINEERING BUILDING 工科楼C座三层371房间
MEETING ROOM 6 会场6	R375, 3F BLOCK-C ENGINEERING BUILDING 工科楼C座三层375房间
MEETING ROOM 7 会场7	R377, 3F BLOCK-C ENGINEERING BUILDING 工科楼C座三层377房间
MEETING ROOM 8 会场8	R757, 7F BLOCK-C ENGINEERING BUILDING 工科楼C座七层757房间
SPEAKER READY ROOM 报告准备间	MEETING ROOM, 1F YIFU BUILDING 逸夫楼一层会议室



Technical Subjects Schedule
技术专题安排

No. 序号	Technical Subjects 会议技术专题	2017/4/18 08:00-16:50	2017/4/19 08:30-16:50	2017/4/20 08:30-16:50
I	Geophysical challenges 地球物理挑战	Room1: session1~2 会场1 单元1~2	—————	—————
II	Exploration geophysics 勘探地球物理	Room4: session3~4 会场4 单元3~4	Room1: session7~8 会场1 单元7~8	Room1: session14~15 会场1 单元14~15
		Room5: session5~6 会场5 单元5~6	Room4: session9~10 会场4 单元9~10	Room4: session16~17 会场4 单元16~17
		—————	Room5: session11~12 会场5 单元11~12	Room5: session18~19 会场5 单元18~19
III	Reservoirs geophysics 油藏地球物理	Room6: session21~22 会场6 单元21~22	Room6: session23~24 会场6 单元23~24	Room6: session25~26 会场6 单元25~26
		—————	—————	Room8: session27 会场8 单元27
IV	Borehole geophysics 井孔地球物理	—————	—————	Room2: session28 会场2 单元28
V	Mineral geophysics 矿藏地球物理	—————	Room8: session29 会场8 单元29	—————
VI	Marine geophysics 海洋地球物理	Room3: session30~31 会场3 单元30~31	Room3: session32 会场3 单元32	—————
VII	Geophysics for geothermal resources 地热资源地球物理	—————	Room8: session33 会场8 单元33	—————
VIII	Engineering geophysics 工程地球物理	Room2: session34~35 会场2 单元34~35	Room2: session36~37 会场2 单元36~37	—————
IX	Geophysics in coal engineering 煤矿工程地球物理	Room2: session38~39 会场2 单元38~39	Room2: session40~41 会场2 单元40~41	—————
X	Rock physics and petrophysics 岩石物理	Room7: session42~43 会场7 单元42~43	Room7: session44~45 会场7 单元44~45	Room7: session46~47 会场7 单元46~47
XI	Unconventional geophysics 非常规地球物理	—————	Room3: session48 会场3 单元48	Room3: session49~50 会场3 单元49~50
XII	Solid Earth geophysics 固体地球物理	Room8: session51~52 会场8 单元51~52	—————	—————
XIII	Geophysical big data analysis 地球物理大数据分析	—————	—————	Room2: session53 会场2 单元53

TECHNICAL COMMITTEE
会议技术委员会



Prof. Yanghua Wang
王仰华 教授

Prof. Yanghua Wang(Co-chair) received a BSc (1983) from Changchun College of Geology, an MSc (1994) from Monash University, and a Ph.D. (1997) from Imperial College London. He worked for Geophysical Research Institute, Ministry of Geology and Mineral Resources, China, from 1983 to 1990. He joined Robertson Research International in 1997 and served as head of R&D from 1998 to 2003. Since 2004, he has been the chair professor of reservoir geophysics at Imperial College London and the director of the Center for Reservoir Geophysics. He has published 100 peer-reviewed papers and three monographs, covering his research interests in seismic modeling, imaging and inversion, reservoir geophysics, and geodynamics. He is the founder and the editor-in-chief of Journal of Geophysics and Engineering. He is also a Fellow of the Institute of Physics, a Fellow of Royal Astronomical Society, and a member of SEG and EAGE.



Dr. Zhijing Wang
王之敬 博士

Dr. Zhijing (Zee) Wang(Co-chair) is currently an executive manager at the Chevron Energy Technology Company. He is also a Chevron Fellow, Chevron's highest recognition for excellence in technology. Zee started his career with Core Laboratories/Western Geophysical in 1988. He joined Chevron as a research geophysicist in 1991. For the past 28 plus years, he has done R&D, technical services, and led projects, initiatives, and several teams and large organizations. Outside Chevron, he was Second Vice President of the SEG 1999-2000, member of the SEG Foundation Board 2006-2007, associate editor for GEOPHYSICS 1995-2003, and a nominee for SEG President in 2002. Zee holds a B.S. degree in Applied Geophysics from Chengdu University of Technology, and M.S. and Ph.D. degrees in Geophysics from Stanford University. He was awarded the SEG Virgil Kauffman Gold Medal in 2002.



Members

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China University of Petroleum (East China)

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Institute of Earthquake Science,
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Jianping Huang
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Chengdu University of Technology

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Hess Corporation

Yang Liu
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Northeast Petroleum University

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Statoil

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Shaohua Zhang
BGP

Yingcai Zheng
University of Houston

Xianhuai Zhu
Forland Geophysical Services LLC

Zhaoyun Zong
China University of Petroleum



Local Organizing Committee

地方组织委员会

Chairman of Local Organizing Committee



Prof. Xingyao Yin
印兴耀 教授

Prof. Xingyao Yin is the professor of geophysics at the school of geosciences of China University of Petroleum (East China) and receiving special government allowance from the State Council. He currently leads the Consortium for Reservoir Geophysics, Committee Member of Chinese Geophysical Society, Member of China National Instructive Committee of Geophysics Education, Member of the Academic Degrees Committee of Shandong Province, and Standing Committee Member of Geophysical Society of Shandong Province. He currently serves as the Editorial Board Member of SCIENCE CHINA Earth Science, Journal of Geophysics and Engineering, Journal of China University of Petroleum, Oil Geophysical Prospecting, Geophysical Prospecting for Petroleum and China Offshore Oil and Gas et al.

Before 2000, Yin focused on the methodology of optimization of seismic attributes and post-stack seismic inversion. From 2000 to the present, his research interests are mainly related to rock physics, pre-stack seismic inversion and reservoir characterization. Awarded the Science and Technology Progress Prizes, including 2 First Prizes, 2 Second Prizes and 3 Third Prizes. Published more than 200 papers, 80 of which were indexed by SCI or EI.

For his outstanding performance in research and education, he was honored as National model teacher, Top ten outstanding teachers of all Shandong Universities, Excellent graduate student mentor of Shandong Province et al.

Xingyao Yin holds a B.S. degree in Applied Geophysics from China University of Petroleum and M.S. degrees in Radio electronics from Lanzhou University and Ph.D. degrees in Geophysics from Institute of Geophysics of Chinese Academy of Sciences.



Vice-chairman of Local Organizing Committee:

Zhenchun Li	China University of Petroleum (East China)
Qizhen Du	China University of Petroleum (East China)
Chengyu Sun	China University of Petroleum (East China)

Secretary:

Guangzhi Zhang	China University of Petroleum (East China)
Danping Cao	China University of Petroleum (East China)
Jianping Huang	China University of Petroleum (East China)

Members:

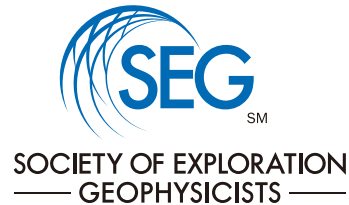
Benchi Chen	Sinopec Corp.
Junxing Cao	Chengdu University of Technology
Shengchang Chen	Zhejiang University
Shumin Chen	PetroChina Daqing Oilfield
Xiaohong Chen	China University of Petroleum (Beijing)
Yingchang Cao	China University of Petroleum (East China)
Xiangdong Du	Research Institute of CNOOC Limited
Jianhua Geng	Tongji University
Tianyue Hu	Peking University
Xiangyun Hu	China University of Geosciences (Wuhan)
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Zuozhen Han	Shandong University of Science and Technology
Cai Liu	Jilin University
Wenkai Lu	Tsinghua University
Xiwu Luan	Qingdao Institute of Marine Geology, China Geology Survey
Yifeng Liu	CNOOC Limited
Yuguo Li	Ocean University of China
Shouli Qu	Sinopec Geophysical Research Institute
Cairui Shao	China University of Petroleum (East China)
Xuefa Shi	The First Institute of Oceanography, State Oceanic Administration
Lixin Tian	CNOOC Ltd. Tianjin

Xiaoming Tang	China University of Petroleum (East China)
Guochen Wu	China University of Petroleum (East China)
Huaihong Wang	Shandong Bureau of Coal Geology
Hui wang	Institute of Oceanology, Chinese Academy of Sciences
Yun Wang	China University of Geosciences (Beijing)
Yanguang Wang	Sinopec Shengli Oilfield
Peifen Xu	Institute of Geology & Geophysics, Chinese Academy of Sciences
Huajian Yao	University of Science and Technology of China
Jun Yao	China University of Petroleum (East China)
Liangjun Yan	Yangtze University
Xiong Xiong	Institute of Geodesy and Geophysics, Chinese Academy of Sciences
Xueshan Yong	Northwest Branch of Research Institute of Petroleum Exploration & Development, PetroChina
Bangliu Zhao	PetroChina Company Limited
Diandong Zhao	Sinopec Geophysical Company
Shanfa Zhang	Shandong Zhengyuan Geophysical Information Technolugu CO., LTD
Yan Zhang	Research Institute of Petroleum Exploration & Development, PetroChina



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中国石油大学 (华东)
CHINA UNIVERSITY OF PETROLEUM

KEYNOTE PRESENTATION
特邀报告简介

KEYNOTE PRESENTATION 1
特邀报告一

Title / 题目: *Computer modeling of geoscience data: Its impact to oil and gas development*

Time / 时间: 08:40-09:10, 18 April 2017

Speaker / 讲员: *Bill Abriel*

Room / 会场: *Yifu Main Hall, 2F Yifu Building*

Speaker Biography
讲员介绍



Bill Abriel, is President of the Society of Exploration Geophysicists and an independent consultant whose sole ownership company is Orinda Geophysical LLC. Bill worked as a geophysicist at Chevron for 38 years, and was the geophysical leader for Chevron in the most of the important oil and gas basins around the world primarily in the Gulf of Mexico, North Atlantic, South America, Australia, and Eurasia. He has worked to develop and deploy new techniques in seismic acquisition, processing, interpretation, research, project management, team building, large scale computing and multi-professional integration. He has held editorial positions in *GEOPHYSICS*, *TLE* and *INTERPRETATION*, served on numerous SEG committees, was the SEG Spring Distinguished Lecturer in 2004, and the Distinguished Instructor in 2008. Abriel was involved in the foundation and operation of the SEG Advanced Modeling Corporation (SEAM) and was twice the board chairman. He was named a life member of SEG in 2007.

Abriel received a B.S. in geosciences and an M.S. in geophysics, both from Pennsylvania State University, where he was a founding member of the SEG student section and earned four varsity letters in sports.



KEYNOTE PRESENTATION 2

特邀报告二

Title / 题目: *Large public domain satellite gravity inversion: Exploring frontier basins*

Time / 时间: 09:10-09:40, 18 April 2017

Speaker / 讲员: *Gaud Pouliquen*

Room / 会场: *Yifu Main Hall, 2F Yifu Building*

Speaker Biography

讲员介绍



Gaud Pouliquen, as a technical analyst at Geosoft, and a background in potential field, Gaud provides solutions to explorers to integrate and make the most of their gravity and magnetic data. Since 2013, she's Geosoft dedicated geoscientist for China.

Gaud holds a PhD in geophysics from the Université Denis Diderot in Paris. Prior to her role at Geosoft, she began her career in the oil industry working for Total in the non-seismic exploration team, before joining the British Geological Survey in Edinburgh, and engage in many UK based and international projects. Through her carrier as a geoscientist, Gaud had the opportunity to collaborate in numerous and varied exploration projects in the academia, mining and petroleum industry and has a special interest in potential field modelling.

KEYNOTE PRESENTATION 3

特邀报告三

Title / 题目: *Challenges and the road ahead in reservoir geophysics*

Time / 时间: 09:40-10:10, 18 April 2017

Speaker / 讲员: *Brian H. Russell*

Room / 会场: *Yifu Main Hall, 2F Yifu Building*

Speaker Biography

讲员介绍



Brian Russell Dr. Russell holds a B.Sc. from the University of Saskatchewan (1975), a M.Sc. from Durham University (1978), U.K., and a Ph.D. from the University of Calgary (2004), all in geophysics. He joined Chevron in Calgary as an exploration geophysicist in 1976 and subsequently worked for Teknica and Veritas before co-founding Hampson-Russell Software with Dan Hampson in 1987. Hampson-Russell is now a subsidiary of CGG, where Brian is Vice President, GeoSoftware and a CGG Fellow. Brian is involved in the research of new AVO, rock physics, inversion and attribute techniques as well as giving courses and talks throughout the world.

He is a Past-President of both the SEG and Canadian SEG (CSEG) and has received Honorary Membership from both societies, as well as the Cecil Green Enterprise Award from SEG (jointly with Dan Hampson). He is currently Chairman of the Board of the Pacific Institute for the Mathematical Sciences (PIMS). He is also an Adjunct Professor in the Department of Geoscience at the University of Calgary and the University of Wyoming and is registered as a Professional Geophysicist (P.Geoph.) in Alberta.



 **MEETING SCHEDULE**
会议日程

I. Geophysical challenges
地球物理挑战

OPENING SESSION

Chairs: Yanghua Wang and Zee Wang

Date: Tuesday Morning, 18 April 2017

Location: Meeting Room No.1 – Yifu Main Hall, 2F Yifu Building

- 08:00–08:10.....**Opening and Welcome Remarks** (Guo Jian, Secretary General of the Chinese Geophysical Society)
- 08:10–08:25.....**Address by Prof. Hao Fang, President of China University Of Petroleum (East China)**
- 08:25–08:40.....**Address by Prof. Chen Yong, President of the Chinese Geophysical Society**
- 08:40–09:10.....**Address and Keynote: Computer modeling of geoscience data: Its impact to oil gas development** (Bill Abriel, President of the SEG)
- 09:10–09:40.....**Keynote: Large public domain satellite gravity inversion: exploring frontier basins** (Gaud Pouliquen*, Gerry Connard)
- 09:40–10:10.....**Keynote: Challenges and the road ahead in reservoir geophysics** (Brian H. Russell*, Xiaogui Miao, and Haihong Wang)
- 10:10–10:30.....**Coffee break**

Session 1: CHALLENGES

Chairs: Hong Liu and Quanshi Guo

Date: Tuesday Morning, 18 April 2017

Location: Meeting Room No.1 – Yifu Main Hall, 2F Yifu Building

- 10:30–10:50.....**Parallel Three-dimensional forward modeling and inversion of Magnetotelluric based on a secondary field approach** (Ce Qin, Xuben Wang and Ning Zhao)
- 10:50–11:10.....**AVO discrimination based on proximal support vector machine** (Li Wenxiu, Wen Xiaotao, Cao Qizhuang, Wei Hao, Liu Minbing)
- 11:10–11:30.....**Challenges and solutions to larger seismic data acquisition** (WeiGuowei*, Li Peiming, Wang Changhui, Jiang Zhong)
- 11:30–11:50.....**Challenging Paradigms and Misconceptions in Geophysical Interpretation: Let the data speak** (David C. Nobes * and Estella Atekwana)
- 11:50–12:10.....**Challenges for velocity model building and depth imaging in mountainous areas** (Jiandong Liang)
- 12:10–13:30.....**Lunch**

Session 2: CHALLENGES

Chairs: Qinyong Yang and Yibo Wang

Date: Tuesday Afternoon, 18 April 2017

Location: Meeting Room No.1 – Yifu Main Hall, 2F Yifu Building

- 13:30–13:50.....**Multi-scale seismic envelope inversion for strong-nonlinear FWI** (Ru-Shan Wu* and Guoxin Chen)
- 13:50–14:10.....**The research of seismic data processing ssequence in gas cloud zone-applied in Bohai P oilfield** (Lei Liu*, Jun Ming, Tongxing Xia, Xuotong Liu and Junbo Zhang)
- 14:10–14:30.....**Electrical properties of shale and its potential applications to shale gas exploration** (Bing Zhang*, Xuben Wang, Jialin Tang, Kai Yang)
- 14:30–14:50.....**Correlation between the electrical properties and the quartz content of the upper Yangtze organic shale** (Lanfeng He, Ling Chen, Wang Xuben, Zhang Bin, Wang Zhenjiang, Yu Qian)
- 14:50–15:30.....**Coffee Break and Poster Session 1**
- 15:30–15:50.....**Full-waveform inversion of elastic data with a corrected acoustic wave propagator** (Yi Li*, Chong Wang and Hanming Gu)
- 15:50–16:10.....**High-frequency FWI and Q migration for gas cloud imaging: a case study in the South China Sea** (Liu Jie, Wang Rui Liang, Liu Jun, Keat Huat Teng*, Yongxia Liu)
- 16:10–16:30.....**Accelerate subsurface-offset extended waveform inversion by adaptive methods** (Lei Fu* and William W. Symes)
- 16:30–16:50.....**Hydrocarbon Exploration in Sub-Basalt Basins- Case studies from Peninsular India** (K.S. Misra , Anshuman Misra)
- 17:20–18:30.....**Dinner**

II. Exploration geophysics
勘探地球物理

Session 3: EXPLORATION

Chairs: Jianwei Ma and Ying Rao

Date: Tuesday Morning, 18 April 2017

Location: Meeting Room No.4–R367, 3F Block-C Engineering Building

- 10:30–10:50.....**Geophysical Analysis of the Miocene-Pliocene Mangaa Formation for Better Exploration within the Parihaka 3D Survey; Taranaki Basin, New Zealand** (Jad e Bujard*, Rui Zhang)
- 10:50–11:10.....**First Arrival Traveltime Approximations for Anisotropic Media** (Yushu Shi*, Wenjun Cao, Lipeng Guo, Zhenchun Li and Guoquan Yang)
- 11:10–11:30.....**Analytic seismic wavelet convolution in depth domain** (Wei Jiang*, Xuehua Chen, Jie Zhang, Jiangfeng Jia, Shuaishuai Jiang)
- 11:30–11:50.....**A wave field reconstruction method of VSP data based on seismic interferometry and imaging application** (Shanglin Liang, Jixiang Xu, Hongwei Guo and Xiping Sun)



11:50–12:10.....**First arrival wave travel time tomography inversion of VTI medium based on fast marching method** (Baihang Zhu*, Kai Zhang, Zhenchun Li)

12:10–13:30.....**Lunch**

Session 4: EXPLORATION

Chairs: Chengyu Sun and Ying Shi

Date: Tuesday Afternoon, 18 April 2017

Location: Meeting Room No.4–R367, 3F Block-C Engineering Building

13:30–13:50.....**The application of the matching Pursuit algorithm in estimating quality factor Q** (Yongxiao Tian*, Fanchang Zhang and Xunxun Zhang)

13:50–14:10.....**State-of-the-Art in shear velocity determination from Geophysical well log data: Verifiable, accurate and touch-stone of all empirical models** (Qamar Yasin, Qizhen Du, Atif Ismail, Muhammad Kashif)

14:10–14:30.....**Application of least-squares reverse time migration to CO2 storage monitoring** (Xiaodong Sun*, zhenchun Li)

14:30–14:50.....**RTM amplitude correction in angle-domain based on Poynting vectors** (Liu Ji-cheng*, Xie Xiao-bi, Chen bo)

14:50–15:30.....**Coffee Break and Poster Session 1**

15:30–15:50.....**Velocity and attribute analysis using AB semblance: A case study using 2D marine data from the Nankai trough** (Pan Deng, Wei Huang, and Hua-Wei Zhou)

15:50–16:10.....**Reflection wave equation for seismic reflection wave and its application for migration** (Shengchang Chen)

17:20–18:30.....**Dinner**

Session 5: EXPLORATION

Chairs: Yungui Xu and Baoli Wang

Date: Tuesday Morning, 18 April 2017

Location: Meeting Room No.5 – R371, 3F Block-C Engineering Building

10:30–10:50.....**The frequency-domain approach for fast multi-parameter magnetic forward modeling of a 3D voxel-based model** (Yatong Cui*, Lianghai Guo)

10:50–11:10.....**Study on directional field filtering in removal of seismic coherent noise and its application** (Liu Jie*, Zhao DianJun, Gao ErGen, Sun ShouCai, Zhang Shuai, Rui JianWen)

11:10–11:30.....**Adaptive estimation of signal-dependent radially Gaussian kernel for time-frequency analysis** (Wenkai Lu*)

11:30–11:50.....**An elastic reverse-time migration method for vertically transversely isotropic (VTI) media** (ChengFeng Guo, XingHua Shi, XiangYu Fei and WenYa Feng, Qizhen Du*)

11:50–12:10.....**Reservoir quantitative seismic interpretation based on spectral decomposition technique** (Li'en Bian*, Qian Yu, Dianbo He, Zhenyu Lv, Teng Liu)

12:10–13:30.....**Lunch**

Session 6: EXPLORATION

Chairs: Xiaodong Sun and Yujin Liu

Date: Tuesday Afternoon, 18 April 2017

Location: Meeting Room No.5 – R371, 3F Block-C Engineering Building

13:30–13:50.....**Research and application on time-depth conversion method for velocity anomaly zone** (Qian Yu*, Li'en Bian, Hongtao Shen, Wei Wang, Jinhui Zhang)

13:50–14:10.....**Theoretical overview of complex seismic attributes: Applications to soft and hard rock environments in South Africa** (Micael Westgate*, Musa Manzi)

14:10–14:30.....**Using Multi-wavelet decomposition and reconstruction technique to describe the Reservoir of Paleogene Slope Break Zone in Bohai offshore** (Hongtao Shen*, Wei Wang, Dehai Qin, Naichuan Guo, Xiang Xie)

14:30–14:50.....**FFD pre-stack depth migration for visco-acoustic VTI medium** (Feng Zhu*, Jianping Huang, Zhenchun Li, Jinqiang Huang)

14:50–15:30.....**Coffee Break and Poster Session 1**

15:30–15:50.....**A well-constrained method of seismic attribute fusion and its application in recognizing channel sands** (Yanli Liu*, Zhenchun Li, Guoquan Yang, Wenjun Cao, Qiang Liu)

15:50–16:10.....**MT applications on overthrust nappes study** (Sun Weibin*, Sun Ximing, Hu Zuzhi)

16:10–16:30.....**Modeling and analysis of full waveform seismic AVAZ responses from anisotropic shale reservoirs** (Zhiqi Guo*, Xu Han, Neng Lu, Cai Liu, Xiwu Liu)

16:30–16:50.....**Extraction of carbonate-karst reservoirs based on adaptive mathematical morphology** (Yi Wang, Wenkai Lu*)

17:20–18:30.....**Dinner**

Session 7: EXPLORATION

Chairs: Jianguo Song and Xiwu Liu

Date: Wednesday Morning, 19 April 2017

Location: Meeting Room No.1 – Yifu Main Hall, 2F Yifu Building

08:30–08:50.....**Seismic data denoising based on modified K-singular value decomposition algorithm** (Xin Tian*, Kai Zhang, Zhenchun Li)

08:50–09:10.....**Seismic modeling in anisotropic media: comparison of three finite difference schemes** (Yungui Xu and Yanghua Wang)

09:10–09:30.....**The common-shot prestack Gaussian beam depth migration in TTI media** (Li Junkang*, Li Zhenchun, Min Zhang, He Wenchang)

09:30–09:50.....**Offset domain common image gather based wave-equation migration velocity analysis** (Zhennan Yu, Yang Liu)

09:50–10:20.....**Coffee Break**

10:20–10:40.....**Numerical simulation of 3D seismic wave field in porous media in mesoscopic scale** (Gang Gao*, Yahua Yang, Zhixian Gui, Zhenhua He)



- 10:40–11:00.....**Fast prediction Channel sand body of Jurassic in Sichuan basin of China**
(Chaorong wu,Wenshen duan)
- 11:00–11:20.....**An effective angle gathers generating of RTM using gradient field of travelttime**
(Yongjie Tang*, Shaoyong Liu, Hanming Gu)
- 11:20–11:40.....**Interpretation of Thin Sand Body Based on Trace Integration**
(Junlin Li* Junhua Zhang,Jing Hou, Xing Xin, Yushan Du)
- 12:00–13:30.....**Lunch**

Session 8: EXPLORATION

Chairs: Changchun Yin and Qizhen Du

Date: Wednesday Afternoon, 19 April 2017

Location: Meeting Room No.1 – Yifu Main Hall, 2F Yifu Building

- 13:30–13:50.....**The near surface challenges and solution in complex exploration areas**
(Liansheng Liu)
- 13:50–14:10.....**Tau-p domain threshold filtering by beam migration method** (Jianping Huang,
Zhanpu Liu, ZhenChun Li)
- 14:10–14:30.....**Nonstationary Sparse Deconvolution with the SPGL1 Algorithm** (Hongling Chen*,
Siyuan Cao, Sanyi Yuan, Zhiqiang Wang, Yongxin Li, Qing Dong, Shian Shen)
- 14:30–14:50.....**DSR equation based 3D pre-stack migration for wide azimuth dataset**
(Tianzhen Wang* and Huazhong Wang)
- 14:50–15:30.....**Coffee Break and Poster Session 2**
- 15:30–15:50.....**High-precision off-line seismic exploration suitable for huge-thick loess tablelands**
(Du Zhongdong*, Chen Maoshan, Yao Zonghui, Du Houyu and Yang Miao)
- 15:50–16:10.....**Quantitative comparison of three pre-stack P-P and P-SV joint inversion methods
using numerical data** (Yuanyin Zhang*, Zhijun Jin, Ning Dong, Xiwu Liu)
- 16:10–16:30.....**Research on reflected wave inversion based on waveform cross-correlation**
(Pengcheng Wang*, Zhenchun Li, Mi Zhang, Jiyou Fu)
- 16:30–16:50.....**3D Modeling From Induced Polarization Method for Identification of Gold Deposit
Exploration in North Minahasa, North Sulawesi, Indonesia**
(Arif Asyari*, Ismail Halim*, Agung Wijaksana*, M. Kurniawan Alfadli*)
- 17:20–18:30.....**Dinner**

Session 9: EXPLORATION

Chairs: Changchun Yin and Danping Cao

Date: Wednesday Morning, 19 April 2017

Location: Meeting Room No.4–R367, 3F Block-C Engineering Building

- 08:30–08:50.....**The absorption and compensation method of pre-stack seismic data based on the
matching pursuit algorithm** (Kaipan Xiao*, Fanchang Zhang, and xunxun Zhang)
- 08:50–09:10.....**Multiple Random Encoding in Full Waveform Inversion** (Xuebao Guo*, Hong Liu,
Ying Shi, Zhen Zhang, Hongliang Jing)
- 09:10–09:30.....**Application of 3D receiver deghosting for the data from South China Sea**
(Hao Zhang*, Bowu Jiang, Yi Zhang, Jinbo Li)
- 09:30–09:50.....**Improved inverse Q-filtering via optimizing the stabilization operator**
(Qing Wei*, and Shuangquan Chen)
- 09:50–10:20.....**Coffee Break**
- 10:20–10:40.....**The implementations of multi-level heterogeneous parallel computation with MPI
and Openacc** (Sihai Wu, Hu Zhao)
- 10:40–11:00.....**Fast inversion of gravity data using parallel preconditioned method** (Taihan Wang*,
Danian Huang, Guoqing Ma, Dailei Zhang, Ye Li, Wenyue Zhou)
- 11:00–11:20.....**Time-domain full waveform inversion using the gradient preconditioning based on
transmitted waves energy** (Xiao-bo Zhang, Jun Tan, Peng Song*, Zhao-lun Liu,
Jin-shan Li, Dong-ming Xia)
- 11:20–11:40.....**Application of matching pursuit in prediction of weak reflection reservoir in
intra-platform shoal, Tarim Basin** (Zhenqing Wang, Hongbin Wang, Huquan Zhang)
- 12:00–13:30.....**Lunch**

Session 10: EXPLORATION

Chairs: Ying Hu and Guangzhi Zhang

Date: Wednesday Afternoon, 19 April 2017

Location: Meeting Room No.4–R367, 3F Block-C Engineering Building

- 13:30–13:50.....**Multi-solution analysis of full waveform inversion based on dynamic misfit function**
(Chao Cui*, Jianping Huang, Zhenchun Li)
- 13:50–14:10.....**Multi-criteria velocity analysis method of seismic data** (Junfa Xie, Xiao Wang,
Yuchao Wang, Wenqing Liu, Yuhe Zhao)
- 14:10–14:30.....**Reservoir Prediction Based on Synchrosqueezed Wavelet Transform**
(Zhang Mengli*, Man Weishi, Wang Daxing, Zhao Yuhua)
- 14:30–14:50.....**New potential data inversion to obtain the geological structures with a Laplacian
kernel** (Zhaohai Meng*)
- 14:50–15:30.....**Coffee Break and Poster Session 2**
- 15:30–15:50.....**OCSA inversion: A joint inversion method with Occam's inversion and SA inversion
for MT** (Xin Hui*, Xiaoping Wu)
- 15:50–16:10.....**Attenuation compensation in VTI full waveform inversion** (Jinli Li)
- 16:10–16:30.....**Porosity-permeability relationship in distinct flow units in light of geophysical and
laboratory methods** (Atif Ismail, Qamar Yasin*, Qizhen Du, Adnan Ahmed, Nasir Khan)



16:30–16:50.....**Discussion on the resolution of the global satellite gravity database**
(Meng Wang*, Junlu Wang, Changli Yao)

17:20–18:30.....**Dinner**

Session 11: EXPLORATION

Chairs: Guochen Wu and Yungui Xu

Date: Wednesday Morning, 19 April 2017

Location: Meeting Room No.5 – R371, 3F Block-C Engineering Building

08:30–08:50.....**Accurate and efficient seismic data interpolation using FK-curvelet transform**
(Benfeng Wang*, Wenkai Lu)

08:50–09:10.....**Integrated Seismic Interpretation, Offshore Peninsular Malaysia**
(Iftikhar Ahmed Satti*, Deva Ghosh and Wan Ismail Wan Yusoff)

09:10–09:30.....**The linear source CSAMT response simulation in the two dimensional anisotropic formation with topography** (Xiong Zhitao, Tang Xingong,* and Li Dandan)

09:30–09:50.....**Adaptive shaping regularization spectral analysis: application to seismic data**
(Mian Zeng *, Youxi Yue, Junxiong Cai, Chenxi Liu)

09:50–10:20.....**Coffee Break**

10:20–10:40.....**Performance evaluation for an optimized resistivity array and conventional arrays in mapping near surface geophysical features**(Fathi M. Abdullah, Meng Heng Loke, Mohd NM. Nawawi and Khiruddin Abdullah)

10:40–11:00.....**Inverse scattering series internal multiple attenuation for prestack land data**
(Jinlong Yang*)

11:00–11:20.....**RFWI with Source Independent Inversion Strategy** (Jianping Huang, Chao Cui*, ZhenChun Li)

11:20–11:40.....**Acoustic VTI modeling with a least-squares-based staggered-grid finite-difference scheme** (Jie Huang*, Bingluo Gu, Guoquan Yang, Zhenchun Li)

12:00–13:30.....**Lunch**

Session 12: EXPLORATION

Chairs: Zhiqi Guo and Jie Tang

Date: Wednesday Afternoon, 19 April 2017

Location: Meeting Room No.5 – R371, 3F Block-C Engineering Building

13:30–13:50.....**Seismic Reflectivity Estimation with Phase-Corrected Wavelet and Sparsity Constraint**
(Song Guo*, Huazhong Wang)

13:50–14:10.....**Resolution enhancement in the generalized S-transform domain based on variational-mode decomposition of seismic data** (Jiangfeng Jia*, Xuehua Chen, Shuaishuai Jiang, Wei Jiang, Jie Zhang)

14:10–14:30.....**Angle-domain elastic Gaussian beam migration with HPC** (Xingchen Shi*, Xuelei Li, Qianru Xu, Weijian Mao, Yubo Yue)

14:30–14:50.....**Stacking sources inter-receiver cross-correlation full waveform inversion**
(Yuzhu Liu, Weigang Liu*)

14:50–15:30.....**Coffee Break and Poster Session 2**

15:30–15:50.....**Acquisition and application of OBS data of Baiyun deep-water area of northern South China Sea** (Ming Zhu*, Chengzhi Yan, Weiwei Zhang, Jun Liu, Yanpeng Zheng, Pengyao Zhi)

15:50–16:10.....**Seismic data gather conditioning for prestack seismic data inversion** (Gang Yu*, Yusheng Zhang, Ximing Wang, Xing Liang, Benjing Liu, Scott Singleton and Maggie Smith)

16:10–16:30.....**Efficient RTM angle gathers using a hybrid method**
(Chengliang Wu*, Huazhong Wang)

16:30–16:50.....**Analysis of Target Stratum's Amplitude Based Seismic Modeling**
(Deng Shuai*, Liu Xuewei)

17:20–18:30.....**Dinner**

Session 13: EXPLORATION

Chairs: Hezhu Yin and Jianping Huang

Date: Wednesday Afternoon, 19 April 2017

Location: Meeting Room No.8 – R757, 7F Block-C Engineering Building

13:30–13:50.....**Potential field anomaly separation with fast continuous wavelet transform**
(Zhang Dailei*, Huang Danian and Zhou Shuai)

13:50–14:10.....**Improved Elastic Ray Impedance** (Xin Fu*, Feng Zhang, Xiang-Yang Li, Wenhao Fan)

14:10–14:30.....**The new progress of TFEM method for hydrocarbon detection** (Zhanxiang He*, Gang Yu, Zhigang Wang, Xuejun Liu, Zhi Zhao)

14:30–14:50.....**Elastic least-squares reverse time migration for multi-component seismic data**
(Wei Zhang*, Ying Shi)

14:50–15:30.....**Coffee Break and Poster Session 2**

15:30–15:50.....**Sparsity-enabled ground-roll attenuation using two-dimensional continuous wavelet transform** (Xin Chen*, Wenchao Chen, Xiaokai Wang, Wei Wang)

15:50–16:10.....**Anomalous amplitudes attenuation based on the seismic wave propagation theory**
(Xuemin Wu*, Yijun Yuan, Hong Li)

16:10–16:30.....**Using the correlation between the reduced-to-pole field and L transform to estimate the magnetization direction** (Cheng Chen, Peng Yu*, Chunfeng Rao)

16:30–16:50.....**One-Step Quasi-P-Waves Forward Modeling in TTI Media with Lowrank Approximation**
(Zhonghui Ge*, Xiaodong Sun, Zhenchun Li)

17:20–18:30.....**Dinner**



Session 14: EXPLORATION

Chairs: Hong Cao and Jiajia Zhang

Date: Thursday Morning, 20 April 2017

Location: Meeting Room No.1 – Yifu Main Hall, 2F Yifu Building

- 08:30–08:50.....**Study on stability and dispersion of the staggered grid difference method of viscous wave equation** (Kun Tian*, Changbo Wang, Jianping Huang, Xuetao Zhang and Changcheng Bu)
- 08:50–09:10.....**The study on anisotropic attenuation of PP-wave AVAz due to fluid-saturated fractures for layered media** (Neng Lu, Cai Liu, Zhiqi Guo*, Xiwu Liu and Yuwei Liu)
- 09:10–09:30.....**Comparisons of FWI using two different implementations of truncated Newton method** (Yi Wang*, Liangguo Dong, Zhenli Wang)
- 09:30–09:50.....**Hybrid rock physics modeling on velocity-temperature trend of heavy oil sands** (Hui Li*, De-hua Han, Jinghui Gao)
- 09:50–10:20.....**Coffee break**
- 10:20–10:40.....**Scheme of applying virtual event method for internal multiples on land seismic data** (Shengpei An*, Tianyue Hu, Jiahui Liu, and Gengxin Peng)
- 10:40–11:00.....**Extension to edge-preserving smooth** (Taikun Shi, Shoudong Huo)
- 11:00–11:20.....**Full travelttime inversion in source domain** (Lu Liu, Bowen Guo, Yi Luo)
- 11:20–11:40.....**Full waveform inversion based on mini-batch gradient descent optimization with geological** (Hui Yang and Bangyu Wu)
- 12:00–13:30.....**Lunch**

Session 15: EXPLORATION

Chairs: Ying Hu and Jianping Huang

Date: Thursday Afternoon, 20 April 2017

Location: Meeting Room No.1 – Yifu Main Hall, 2F Yifu Building

- 13:30–13:50.....**Reflection full travelttime inversion in the image domain** (Yan Wu*, Yue Ma, and Yujin Liu)
- 13:50–14:10.....**Fine Description Technique of Hydrocarbon Vertical Migration Pathway in HTHP Formations of Yinggehai and Qiongdongnan Basins** (Fan Zhou*, Caiwei Fan, Aiqun Liu, Peng Song)
- 14:10–14:30.....**Fractures detection based on kichhoff pre-stack time migration in local angle domain: A case study** (Kai Xu*, Sam Zandong Sun)
- 14:30–14:50.....**Accelerating viscoacoustic wave extrapolation by parallelizing local spectral operator** (Hongyu Zhou, Yang Li, Xiaohui Cai, Enjiang Wang, Shigang Xu, Jing Wang)
- 14:50–15:30.....**Coffee Break and Poster Session 3**

- 15:30–15:50.....**Efficient wave-equation tomography with surface offset gathers** (Yujin Liu, Yan Wu, Xiongwen Wang, Yi Luo)
- 15:50–16:10.....**3D forward modeling of viscoacoustic and viscoelastic media based on MPI-OpenMP combined parallelization** (Kun Tian*, Changbo Wang, Jianping Huang, Xuetao Zhang and Changcheng Bu)
- 16:10–16:30.....**Scalar SP and SS images from 3D elastic reverse-time migration** (Xufei Gong and Qizhen Du*)
- 16:30–16:50.....**Seismic data interpolation based on radial basis function** (Mi Zhang, Yang Liu)
- 17:00–17:20.....**Conference Conclude (room1)**
- 17:20–18:30.....**Dinner**

Session 16: EXPLORATION

Chairs: Wenkai Lu and Jianhu Gao

Date: Thursday Morning, 20 April 2017

Location: Meeting Room No.4–R367, 3F Block-C Engineering Building

- 08:30–08:50.....**Time-domain full waveform inversion using the gradient preconditioning based on seismic wave energy: Application to the South China Sea** (Zhong Mengxuan, Tan Jun*, Song Peng, Zhang Xiao-bo, Xie Chuang, Liu Zhao-lun)
- 08:50–09:10.....**Combined adaptive multiple subtraction based on event tracing and Wiener filtering** (Hao Tan, Jun Tan*, Peng Song, Lei Wang, Meng-xuan Zhong, Yuan-heng Li, Jing Li)
- 09:10–09:30.....**Anisotropic parameter estimation from HTI media by seismic waveform tomography** (Fengxia Gao*, Yun Wang)
- 09:30–09:50.....**The application of TFEM to multi-types reservoirs in geologically complex areas** (Li Dechun*, Wang Caifu, Yang Jun, Zhao Zhi, and Bai Shiyun)
- 09:50–10:20.....**Coffee Break**
- 10:20–10:40.....**PS-wave anisotropic migration velocity analysis based on simplified moveout equation** (Haifeng Chen*, Zhongping Qian, Dongdi Cai, Zengqiang Liu, Lulu Mei, Pengyuan Sun, Yusheng Zhang, Xiangyang Li)
- 10:40–11:00.....**Consine module window function staggered-grid finite-difference for elastic wave modelling** (Wang Jian*, Meng Xiao-Hong, Liu Hong, Zheng Wan-Qiu)
- 11:00–11:20.....**Seismic Data Resolution Improvement by Compensating Time-frequency Spectrum of Synchrosqueezing Wavelet Transform** (Yan Zhang*, Zhenchun Li, Jiao Wang)
- 11:20–11:40.....**Pre-stack 5D seismic data reconstruction based on a fast uncoiled randomized QR decomposition method** (Shenghou Wang*, Jianjun Gao, Xiaohong Meng)
- 12:00–13:30.....**Lunch**



Session 17: EXPLORATION

Chairs: Quanshi Guo and Feng Zhang

Date: Thursday Afternoon, 20 April 2017

Location: Meeting Room No.4-R367, 3F Block-C Engineering Building

- 13:30–13:50.....**The TDIP Parameters Extraction and Applications** (JianZhong Cheng, LiangJun Yan, XiaoLong Tong, Qing Liu)
- 13:50–14:10.....**A study of Taihe iron deposit in Sichuan, China Based on Magnetic Anomalies** (Yang Xue, Li Jing, Tian Song)
- 14:10–14:30.....**A new seismic interpretation method based on rotating rhombus to finely describe the fault zone** (Li Jun, ZhangJunhua, Li Junlin, Li Zhiqiang, Gong Mingping)
- 14:30–14:50.....**Oil and gas exploration seismic key technology and application in loess plateau of northern Shaanxi province** (Wang Daxing)
- 14:50–15:30.....**Coffee Break and Poster Session 3**
- 15:30–15:50.....**The application of transient electromagnetic method in tunnel exploration** (Zhenguang Zhang*, Zhaofa Zeng, Xiaodong Sun, Xuegang Wang, Rongqin He.)
- 15:50–16:10.....**Research on spectral inversion method based on Moore-Penrose algorithm** (Zhang Qiu*, Junhua Zhang, Zhang Xiao Hui, Hu Wen, Liu lei)
- 17:00–17:20.....**Conference Conclude (room1)**
- 17:20–18:30.....**Dinner**

Session 18: EXPLORATION

Chairs: Jianwei Ma and Yan Wu

Date: Thursday Morning, 20 April 2017

Location: Meeting Room No.5 – R371, 3F Block-C Engineering Building

- 08:30–08:50.....**Suppression of strong noise in MT data based on reconstruction algorithm of compressive sensing** (Guang Li*, Jingtian Tang, Shangshi Wen, Jin Li, Lincheng Zhang, Shuanggui Hu, Feng Zhou, Cong Zhou)
- 08:50–09:10.....**Multichannel seismic impedance inversion with anisotropic total variation regularization** (Dehua Wang*)
- 09:10–09:30.....**A two-step anisotropic seismic AVO inversion strategy for the VTI media** (Tuo Zhang*, Feng Zhang, Xiang-Yang Li)
- 09:30–09:50.....**The application of OVT technique in 3D wide-azimuth land data of Western China** (Fei Li*, Wensheng Duan, Hong Liu, Haiyan Wang, Ting Hu)
- 09:50–10:20.....**Coffee break**
- 10:20–10:40.....**Application of Multi-Satellite altimeter gravity data in analysis of South China Sea basins** (Shaofei Liu*, Minghua Zhang)

- 10:40–11:00.....**Effective simulation of pure acoustic wave equation in TTI media** (Shigang Xu, Yang Liu)
- 11:00–11:20.....**Reverse time migration in complex TI media using wavefield decomposition** (Xu Guo*, JianPing Huang, ZhenChun Li, JinQiang Huang, Feng Zhu)
- 11:20–11:40.....**High order finite difference seismic wave field characteristics of fluid-solid coupling media** (Guochen Wu, Qingyang Li*, Zhanyuan Liang)
- 12:00–13:30.....**Lunch**

Session 19: EXPLORATION

Chairs: Hong Cao and Fengxia Gao

Date: Thursday Afternoon, 20 April 2017

Location: Meeting Room No.5 – R371, 3F Block-C Engineering Building

- 13:30–13:50.....**S-wave velocity estimation for calcium-bearing shaly sand formation** (Yahua Yang*, Gang Gao, Bin Zhao, Zhixian Gui)
- 13:50–14:10.....**PLSFFD pre-stack depth migration for VTI medium** (Feng Zhu*, Jianping Huang, Zhenchun Li, Jinqiang Huang)
- 14:10–14:30.....**A New Explicit Compact Hybrid-Grid Finite-Difference Scheme for Wave Propagation** (Du Qizhen*, Zhao Qiang, Gong Xufei)
- 14:30–14:50.....**Shaped multichannel singular spectrum analysis for random noise attenuation** (Zhao Qiang, Du Qizhen*, Gong Xufei)
- 14:50–15:30.....**Coffee Break and Poster Session 3**
- 15:30–15:50.....**Application of deghosting based on wavelet method in Gulf of Mexico** (Dan Jiang, Xiaodong Pu, zhiguo Ma, Mengchang Shi, Junjun Li)
- 15:50–16:10.....**Full waveform inversion based on a spectral-element method and a scattering-integral algorithm** (Yuzhu Liu, Wenyi Zheng*)
- 16:10–16:30.....**A modified Cadzow filtering algorithm based on anti-picket fence effect** (Jianyou Chen*, Wenchao Chen, Xiaokai Wang, Jiao Liu, Wei Wang)
- 16:30–16:50.....**Efficient Gaussian beam method in time domain for anisotropic media** (Qingda Lv, Jianping Huang, Zhenchun Li, Jianwen Wu, Fucai Dai)
- 17:00–17:20.....**Conference Concludes (room1)**
- 17:20–18:30.....**Dinner**



Session 20: EXPLORATION

Chairs: Jiandong Liang and Xiaodong Sun

Date: Thursday Morning, 20 April 2017

Location: Meeting Room No.8 – R757, 7F Block-C Engineering Building

- 08:30–08:50.....**Inversion based internal multiple attenuation study** (Jiahui Liu*, Tianyue Hu)
- 08:50–09:10.....**Challenges for improving the image of the igneous rock-related complex structures** (Yishan Zhang*, Jiuying Guo)
- 09:10–09:30.....**QP wave equation forward modeling in VTI medium based on dual-variable grid** (Mingwei Yang, Jianping Huang, Zhenchun Li)
- 09:30–09:50.....**A method for extracting ADCIGs during reverse time migration** (Haiqiang Li, Guoquan Yang, Zhenchun Li, Zhang Kai)
- 09:50–10:20.....**Coffee break**
- 10:20–10:40.....**Magnetotelluric inversion using L1-norm regularization of wavelet coefficients** (Shi-Wei Wang*and Xiao-Ping Wu)
- 10:40–11:00.....**Approximation solver of Integral Equation for Airborne EM Modeling** (Yongchao Lu*, Changchun Yin, Xin Huang, Yunhe Liu, Jing Cai)
- 11:00–11:20.....**Multi-grid Tomography Inversion Based on Gauss Beam Migration** (Ziliang Zhang, Zhenchun Li, Kai Zhang, Tao Rong)
- 11:20–11:40.....**Time Domain Wavefield Reconstruction Inversion** (LIN Yu-Zhao, LI Zhen-Chun, ZHANG Kai)
- 12:00–13:30.....**Lunch**

III. Reservoirs geophysics
油藏地球物理

Session 21: RESERVOIRS

Chairs: Brian Russell and Zhaoyun Zong

Date: Tuesday Morning, 18 April 2017

Location: Meeting Room No.6 – R375, 3F Block-C Engineering Building

- 10:10–10:30.....**Coffee Break**
- 10:30–10:50.....**Analysis of the role of seismic velocity in depth prediction** (Xuefeng Zhou*, Lei Liu, Xuetong Liu, Jianhui Liu, Yong Pan, Wenbin Li and Gongli Liu)
- 10:50–11:10.....**Analysis of influencing factors of tuning thickness for thin interlayers** (Da Zhang*, Libin Liu, Qianru Xu, Chengyu Sun)
- 11:10–11:30.....**A method of classified RGB fusion of multi-scale curvature attributes based on the image background subtraction** (Xingran Fan *, Yong Li, Yubang Zhou and Peng He)
- 11:30–11:50.....**Stochastic inversion of elastic impedance based on PSOGSA algorithm** (Yanan Xiao,Guangzhi Zhang,Jin Chen)

- 11:50–12:10.....**Stability enhancement of anisotropic elastic impedance inversion based on perturbation mechanism** (Chang Wang *, Xingyao Yin, Zhaoyun Zong)

12:10–13:30.....**Lunch**

Session 22: RESERVOIRS

Chairs: Jie Tang and Jiajia Zhang

Date: Tuesday Afternoon, 18 April 2017

Location: Meeting Room No.6 – R375, 3F Block-C Engineering Building

- 13:30–13:50.....**Reservoir modelling based on 3D high-resolution seismic data**(Chen Xin, Wei Xiao-dong, Li Yan-jing, Yan Xiao-huan, Xia Yaliang)
- 13:50–14:10.....**The seismic reservoir characterization of Paleogene Shahejie formation: A case study in Bohai Bay, China** (Xuetong Liu*, Chuanqi Liu, Bo Wang, Haifeng Zhao, Xuefeng Zhou, Lei Liu, Jianhui Liu)
- 14:10–14:30.....**The research of foreset reflection and its application on Paleogene Shahejie formation reservoir prediction: An example from Bohai Bay, China** (Xuetong Liu*, Chuanqi Liu, Haifeng Zhao, Xuefeng Zhou, Lei Liu, Jianhui Liu, Hebing Tang)
- 14:30–14:50.....**Acoustic heterogeneity and characterizing depositional environments; A new methodology** (Cyril D. Boateng* and Li-Yun Fu)
- 14:50–15:30.....**Coffee Break and Poster Session 1**
- 15:30–15:50.....**Pure acoustic simulation in TTI media for irregular topography models** (Qing Dong*, Ying Rao, Dechao Han)
- 15:50–16:10.....**The Research and Application of High Precision Velocity model Building Based on Velocity Anisotropy** (XU Hai*, GAO Jun, SUN Hongjun, LIU Yaming, KONG Fangjun)
- 16:10–16:30.....**The Application of a Various Parameter Gradient Structure Tensor Parallel Method on small Fracture Detection** (Chao Feng*, Jianguo Pan, Duo nian Xu , Tuan yu Teng,Lu Yin)
- 16:30–16:50.....**Anisotropic Cosimulation for Reservoir Characterization** (Mailikai·Abodumajiti, Jianhua Geng)
- 17:20–18:30.....**Dinner**



Session 23: RESERVOIRS

Chairs: Laisheng Cao and Xuri Huang

Date: Wednesday Morning, 19 April 2017

Location: Meeting Room No.6 – R375, 3F Block-C Engineering Building

08:30–08:50.....**The Elastic Wave Field Modeling of Dual-phase Media Based on Reflectivity Method**
(Kang Chen*, Qi Ran, Xuan Zhang)

08:50–09:10.....**Seismic Lithofacies Computation Method Based on Deep Learning** (Lihui Liu*,
Rong Lu, Jianhai Li, Wenkui Yang)

09:10–09:30.....**Fracture characterization for shale reservoirs using P-wave azimuthal seismic
inversion** (Shuo Pang, Cai Liu, Zhiqi Guo, Xiwu Liu, Yuwei Liu)

09:30–09:50.....**New understanding and effective seismic approaches on carbonate heterogeneity**
(Fangjian Xue*, Jun Tian, Haijun Yang, Chunshu Luo, Gengxin Peng, Xue Lei, Chuan Wu, Pin Yang)

09:50–10:20.....**Coffee Break**

10:20–10:40.....**Elastic impedance inversion in TTI media** (Wang Xiu-wei, Zhang Guang-zhi,
Xiao Peng-fei, Lin Zheng-liang, Song Jia-jie, Tang Yun-wei)

10:40–11:00.....**3D seismic attributes for platinum exploration and mine planning in the Bushveld
Complex** (South Africa) (Musa Manzi*, Raymond Durrheim, Susan Webb)

11:00–11:20.....**Application of Seismic Attributes in the Sand body Plane Heterogeneity**
(Pengzhi Zhang, Huajing Chen, Hailiang Jia, Baicong Ren, Jinchang Su)

11:20–11:40.....**Joint Inversion of azimuthal PP and PS Wave EI in Fracture Media** (Bingyi Du*,
Enli Wang, Wuyang Yang, Xueshan Yong)

12:00–13:30.....**Lunch**

Session 24: RESERVOIRS

Chairs: Fanchang Zhang and Ying Shi

Date: Wednesday Afternoon, 19 April 2017

Location: Meeting Room No.6 – R375, 3F Block-C Engineering Building

13:30–13:50.....**Identifying stratigraphic traps in sub sag area** (Laisheng Cao, Lin Yu*, Hong Chen,
Hua Liu, Xiyan Dong, Yingjie Du)

13:50–14:10.....**Seismic amplitude inversion for the characterization of interbedded sand-shale
reservoirs** (Zhiqi Guo*, Cai Liu, Shumin Chen, Yusheng Zhang, Jianjun Song)

14:10–14:30.....**Application of waveform inversion technique in prediction of beach bar sandstone
reservoir** (Baojuan Li*, Jianjun Bi)

14:30–14:50.....**High resolution sequence stratigraphy constrained precise Palaeogene reservoir
prediction** (Xiang Xie, Zhongqiao Zhang, Jianhua Fan, Hongtao Shen, Jinghua Gao)

14:50–15:30.....**Coffee Break and Poster Session 2**

15:30–15:50.....**Russell Fluid Factor-based PP and PS Elastic Impedance Joint Inversion**
(Yuhang Sun, Tiansheng Chen, Yuxin Ji, Lei Shi, Yang Liu, Lekai Zhou)

15:50–16:10.....**Simulation of fluid flow and its seismic responses under anisotropic condition**
(Ke Peng*, Ying Rao, Y.C. Ning)

16:10–16:30.....**The pre-stack seismic stochastic inversion based on spectrum simulation**
(Wang* Baoli, Hao Xuejing, Liu Chanjuan, Yin Xingyao)

16:30–16:50.....**Application of fracture prediction technique based on the OVT-domain-azimuth
pre-stack gather in granite buried-hill**(Wang zhongfan, Wei Xiaodong, Xia Yaliang,
Wang hongmei, Chen gang, Zhang Suhong, Wang Yinxiao, Wang Yizhong)

17:20–18:30.....**Dinner**

Session 25: RESERVOIRS

Chairs: Jianchao Cai and Zhaoyun Zong

Date: Thursday Morning, 20 April 2017

Location: Meeting Room No.6–R375, 3F Block-C Engineering Building

08:30–08:50.....**Deep Learning: Chance and Challenge for Deep Gas Reservoir Identification**
(Cao Junxing and Wu Shikai)

08:50–09:10.....**Thinbed prediction using low-frequency slicing: Theory and application**
(Ni Changkuan*, Liu Huaqin, Su Mingjun, Li Zhenyang, Ma Hailong)

09:10–09:30.....**Improved multichannel matching pursuit and its application in seismic trace
decomposition** (Cheng Yuan, Mingjun Su)

09:30–09:50.....**Nonstationary deconvolution based on three different hyperbolic smoothing
methods** (Xuejing Hao*, Xingyao Yin, Baoli Wang, Kun Li)

09:50–10:20.....**Coffee Break**

10:20–10:40.....**An adaptive method to estimate S-wave velocity and rock modulus**
(Wenjun Cao*, Bingtao Wei, Huazhong Wang)

10:40–11:00.....**Time-lapse Seismic Receiver Motion Correction Method and Application**
(Dongchuan Xue*, Zhenyu Zhu)

11:00–11:20.....**Reservoir thickness forecasting based on Deep Belief Networks**
(Lu Liu, Zhang Guangzhi, Zhao Chen)

11:20–11:40.....**Optimizing processing of Pre-stack gathers and its application in AVO analysis**
(Jianguo*, Li Yuanjuan)

12:00–13:30.....**Lunch**



Session 26: RESERVOIRS

Chairs: Ying Rao and Xiwu Liu

Date: Thursday Afternoon, 20 April 2017

Location: Meeting Room No.6-R375, 3F Block-C Engineering Building

- 13:30-13:50.....**Feasibility evaluation of carbon dioxide sequestration: A case study of ZJ oilfield in Ordos Basin, China** (YANG Ruizhao, ZHANG Tian, DENG Lijun, WANG Li, MENG Lingbin)
- 13:50-14:10.....**The research of high-quality reservoir seismic response of sha-2 member in Liaoxi salient** (Jinhui Zhang *, Kui Wu, Wei Wang, Qiuhui Chai, Jing He)
- 14:10-14:30.....**The application of time-lapse binning of 4D data in china offshore oil field** (He Yangyang*, Zhu Zhenyu, Wang Xiaoliu, Chen Jianjun, Liu Zhipeng)
- 14:30-14:50.....**An effective method to predict porosity using GA-WNN hybrid algorithm** (Han Zhong, Yang Liu, Jinpeng Liu, Lekai Zhou)
- 14:50-15:30.....**Coffee Break and Poster Session 3**
- 15:30-15:50.....**The Technique of Porosity Predicting Based on AVO Fluid Inversion** (Xiping Sun*, Yongcai Yu, Linggao Li, Hongwei Guo)
- 15:50-16:10.....**Prediction of shale fracability based on quantitative seismic interpretation** (Lin Wang*, Feng Zhang, Xiangyang Li)
- 16:10-16:30.....**Attenuation Parameters Extraction and Hydrocarbon Identification based on frequency dependent Teager energy** (Jing-jing Zheng*, Haojie Liu, Songhui Lin, Jiusheng Li, Maoqiang Zhao)
- 17:00-17:20.....**Conference Concludes (room1)**
- 17:20-18:30.....**Dinner**

Session 27: RESERVOIRS

Chairs: Kyle Spikes and Qizhen Du

Date: Thursday Afternoon, 20 April 2017

Location: Meeting Room No.8 - R757, 7F Block-C Engineering Building

- 13:30-13:50.....**A Rytov Approximation Modeling for Fluid-Saturated Reservoir Based on the Diffusion-Viscous Theory** (Shuaishuai Jiang*, Xuehua Chen, Jiangfeng Jia, Wei Jiang, Jie Zhang)
- 13:50-14:10.....**Seismic spectral decomposition method based on the deconvolution synchrosqueezing generalized S transform** (Yijiang Zhang*, Xiaotao Wen, Qizhuang Cao, Ting Liu, Hao Wei, Minbing Liu)
- 14:10-14:30.....**Extraction method based on curvature of GST attributes and applications** (Yubang Zhou*, Yong Li, Xinran Fan, Peng He)
- 14:30-14:50.....**Carbonate Diagenetic Facies Seismic Prediction---A Case of FXG Formation, LG oil field, Sichuan basin, China** (Shaoying Chang, Zhanfeng Qiao)

14:50-15:30.....**Coffee Break and Poster Session 3**

- 15:30-15:50.....**SMI-A New Way of Doing High-Resolution Seismic Inversion** (Bi Jianjun, Huang Junbin)
- 15:50-16:10.....**A grey theory-based method for meandering reservoir connectivity and its application for the remaining oil forecasting** (Bai Qingyun*, Ming Jun, Xia Tongxing, Liu feng, Fu Rong)
- 16:10-16:30.....**Direct fluid factor AVO inversion and deep reservoir application** (Huixin Wang*, Xingyao Yin, Danping Cao)
- 16:30-16:50.....**Study on the Compensation for the Seismic "Energy Shadow"** (Ming Jun*, Zhou Xuefeng, Liu Lei, Liu Chuanqi, Guo Jun, Zhou Jianke, Pan Yong)
- 17:00-17:20..... **Conference Concludes (room1)**
- 17:20-18:30.....**Dinner**

IV. Borehole geophysics
井孔地球物理

Session 28: BOREHOLE

Chairs: Hezhu Yin and Xiaoming Tang

Date: Thursday Afternoon, 20 April 2017

Location: Meeting Room No.2-Yifu Lecture Room, 1F Yifu Building

- 13:30-13:50.....**Method of fluid identification in carbonate reservoir based on particle swarm optimization and fuzzy c-means clustering algorithm (PSO-FCM)** (Zhang Yan*, Chen Ganghua)
- 13:50-14:10.....**Numerical simulation of induction resistivity logging while drilling tool by 3D FEM** (Zhengming Kang*, Shizhen Ke, Ming Jiang, Chengfang Yin, Xu Sun)
- 14:10-14:30.....**Three-dimensional forward modeling and inversion of Borehole-to-surface electrical imaging** (Ze Bai*, Maojin Tan.)
- 14:30-14:50.....**Symmetric effect in the borehole to surface electrical resistivity tomography survey** (Haoran Wang* and Chih-Ping Lin)
- 14:50-15:30.....**Coffee Break and Poster Session 3**
- 15:30-15:50.....**Estimation of shear wave based on optimized log interpretation for organic shale** (Maojin Tan*, Xiao Peng, Jingjing Xu)
- 15:50-16:10.....**Elastic orthotropy due to aligned fractures in vertical transverse isotropy: Theoretical modeling and application to borehole measurements** (Song Xu*, Xiao-Ming Tang, Yuan-Da Su, Chun-Xi Zhuang, and Jian-Song Lin)
- 16:10-16:30.....**Numerical simulation of microseismic wave propagation for underground gas storage** (Fei Wang*, Gang Xu, Xinxin Qu, Lulu Wei)
- 16:30-16:50.....**VSP wavefield decomposition using global and local optimization-based inversion** (Lekai Zhou, Yang Liu, Zhiming Ren, Han Zhong, Yuhang Sun)
- 17:00-17:20.....**Conference Conclude (room1)**
- 17:20-18:30.....**Dinner**



V. Mineral geophysics

矿藏地球物理

Session 29: MINERAL AND GEOTHERMAL RESOURCES

Chairs: Stephen Gelinsky and Qingtian Lv

Date: Wednesday Morning, 19 April 2017

Location: Meeting Room No.8 – R757, 7F Block-C Engineering Building

- 08:30–08:50.....**Geochemical characteristics of the bituminous rock asphalt in Buton island, SE Sulawesi, Indonesia** (Jamaluddin*, Altin Massinai, Dahlang Tahir)
- 08:50–09:10.....**Geophysical characteristics of polyhalite and its research on seismic exploration technology--a case study of LH area in east Sichuan basin** (Wen Gu, Min Xu, Hong Liang, Jing Luo, Dongjun Zhang, Xiong Zhang)
- 09:10–09:30.....**Image analysis of rock thin section based on machine learning** (Zheng Ma, Shichen Gao)
- 09:30–09:50.....**Quantitative analysis of rock mineral based on terahertz time-domain spectroscopy technology** (Shichen Gao, Yan Zhang*)
- 09:50–10:20.....**Coffee Break**
- 10:20–10:40.....**Curie point isotherm from spectral analysis of aeromagnetic data in China and its application for geothermal resource exploration**(Hai Yang*, Shengqing Xiong, Xingtao Kuang, Hongrui Zhang, Yanyun Ding, Zhankui Li)
- 10:40–11:00.....**Fine interpretation of 3D structure of low-amplitude structures and complicated fault** (Xiangxue Li)
- 11:00–11:20.....**Interpretation of gravity data to delineate underground structure in the Gonghe geothermal field, China** (Rongqin He, Zhaofa Zeng, Xueyu Zhao*, Wei Du, Zhijun Huo, Erqiao Song)
- 11:20–11:40.....**Seismic imaging for the geothermal resources with dense seismic array and passive sources** (Zhiwei Li*, Feng Bao, Senqi Zhang, Xiaofeng Jia, David Yuen)
- 12:00–13:30.....**Lunch**

VI. Marine geophysics

海洋地球物理

Session 30: MARINE

Chairs: Xuelin Qiu and Kai Zhang

Date: Tuesday Morning, 18 April 2017

Location: Meeting Room No.3–R365, 3F Block-C Engineering Building

- 10:10–10:30.....**Coffee Break**
- 10:30–10:50.....**NSFC Open Research Cruise 2010-2017 of marine geophysics in the northern South China Sea** (Xuelin QIU*, Haibo HUANG, Jiazheng ZHANG, Minghui ZHAO, Huilong XU)

- 10:50–11:10.....**Numerical simulation and feature analysis of OBC dual-sensor data** (Ning Qin*, Hongxian Liang, Li Gao and Peiti Liu)
- 11:10–11:30.....**Preliminary study of seismic oceanography for seafloor processes** (Haibin Song*, Jiangxin Chen, Yongxian Guan, Minghui Geng, Yang Bai)
- 11:30–11:50.....**Vector-decomposition-based acoustic-elastic coupled equation for OBS data V-ERTM** (Pengfei Yu*, Jianhua Geng)
- 11:50–12:10.....**Application of side scan sonar in the detection of sunken oil in shallow sea** (Baojuan Li*, Wei An, Jianwei Li, Yupeng Zhao Xiaowei Shi, Weibo Wang)
- 12:10–13:30.....**Lunch**

Session 31: MARINE

Chairs: Haibin Song and Hong Liu

Date: Tuesday Afternoon, 18 April 2017

Location: Meeting Room No.3–R365, 3F Block-C Engineering Building

- 13:30–13:50.....**Multistage rifting of the NW continental margin of the South China Sea from wide-angle seismic modeling** (Haibo Huang*, Klingelhoefer Frauke, Xuelin Qiu)
- 13:50–14:10.....**Full waveform inversion in acoustic-elastic coupled media based on the finite-difference method** (Jianlu Wu*, Guochen Wu)
- 14:10–14:30.....**A new method to study seawater seismic facies, based on computational fluid dynamics** (Xitong Huang, Haibin Song*)
- 14:30–14:50.....**Influence of cable depth on seismic data quality and deghosting effect** (Jinqiang Zhu*, Tao Xie, Mingxia Jin, Ziqiu Wang, Jinghua Gao)
- 14:50–15:30.....**Coffee Break and Poster Session I**
- 15:30–15:50.....**Q value extraction method based on wavelet frequency division technology** (Xiaojie Wang*, Xiwu Luan)
- 15:50–16:10.....**Velocity model building and imaging practice for 3D China Sea multi-component data** (Xiaogang Huang*, Weixin Li, Yunpeng Zhang, Nansen Jiang, Dongchuan Xue)
- 16:10–16:30.....**Elastic wave propagation characteristics in two-phase media with anisotropy induced by cracks** (Xinxin Liu*, Xiwu Luan)
- 16:30–16:50.....**Marine electromagnetic experiments in the South China Sea** (Ya Xu*, Minghui Zhao, Qingyu You, Song Huang, Tianyao Hao, Xuelin Qiu, Fangzhou Nan)
- 17:20–18:30.....**Dinner**



Session 32: MARINE

Chairs: Zhonghe Pang and Wen Yin

Date: Wednesday Morning, 19 April 2017

Location: Meeting Room No.3-R365, 3F Block-C Engineering Building

- 08:30-08:50.....**Bohai Bay is the center of lithosphere and crust thinning of North China Craton? —Geophysical study on the deep structure** (Tianyao Hao*, Lihua Liu, Chuanchuan Lv, Ya Xu, Qingyu You)
- 08:50-09:10.....**De-ghosting for high resolution variable-depth streamer data** (Jun Pan*, Xishuang Li)
- 09:10-09:30.....**Resolution Enhancement for Hydrate Imaging by Loop Reconvolution** (Welayaturromadhona*, Widya Utama, Firman Syaifuddin, How Wei Chen)
- 09:30-09:50.....**Subaqueous sand dune characteristics and migration in the northern South China Sea** (Minghui Geng, Haibin Song*, Yongxian Guan, Yang Bai, Shengxuan Liu, Yewei CHEN)
- 09:50-10:20.....**Coffee Break**
- 10:20-10:40.....**The Identification of Magnetic Stripes: Corrected Age of Seafloor Spreading in the South China Sea Basin** (Guanxin Wang*, Xiaohong Meng, Chunxiao Xiu, Lianghui Guo and Shuling Li)
- 10:40-11:00.....**Significance of deep seismic survey on IODP367-368 in the South China Sea and suggestions for future OBS deployment** (Minghui Zhao*, Qiang Wang, Longtao Sun, Jean-Claude Sibuet, Zhen Sun, Xuelin Qiu)
- 11:00-11:20.....**Degree of serpentinization in the forearc mantle wedge of Kyushu subduction zone** (Shaohong Xia, Jinlong Sun, Haibo Huang)
- 11:20-11:40.....**A compensatory velocity model building method with DWT and grid-based tomography** (TongjuGong*, Miao Liu, Jianqing Guo, Qinghui Wei, HuangjinZuo, Zaiyu Ding)
- 12:00-13:30.....**Lunch**

VII. Geophysics for geothermal resources

地热资源地球物理

Session 33: MINERAL AND GEOTHERMAL RESOURCES

Chairs: Stephen Gelinsky and Qingtian Lv

Date: Wednesday Morning, 19 April 2017

Location: Meeting Room No.8 – R757, 7F Block-C Engineering Building

- 08:30-08:50.....**Geochemical characteristics of the bituminous rock asphalt in Buton island, SE Sulawesi, Indonesia** (Jamaluddin*, Altin Massinai, Dahlang Tahir)
- 08:50-09:10.....**Geophysical characteristics of polyhalite and its research on seismic exploration technology—a case study of LH area in east Sichuan basin** (Wen Gu, Min Xu, Hong Liang, Jing Luo, Dongjun Zhang, Xiong Zhang)
- 09:10-09:30.....**Image analysis of rock thin section based on machine learning** (Zheng Ma, Shichen Gao)

- 09:30-09:50.....**Quantitative analysis of rock mineral based on terahertz time-domain spectroscopy technology** (Shichen Gao, Yan Zhang*)
- 09:50-10:20.....**Coffee Break**
- 10:20-10:40.....**Curie point isotherm from spectral analysis of aeromagnetic data in China and its application for geothermal resource exploration**(Hai Yang*, Shengqing Xiong, Xingtao Kuang, Hongrui Zhang, Yanyun Ding, Zhankui Li)
- 10:40-11:00.....**Fine interpretation of 3D structure of low-amplitude structures and complicated fault** (Xiangxue Li)
- 11:00-11:20.....**Interpretation of gravity data to delineate underground structure in the Gonghe geothermal field, China** (Rongqin He, Zhaofa Zeng, Xueyu Zhao*, Wei Du, Zhijun Huo, Erqiao Song)
- 11:20-11:40.....**Seismic imaging for the geothermal resources with dense seismic array and passive sources** (Zhiwei Li*, Feng Bao, Senqi Zhang, Xiaofeng Jia, David Yuen)
- 12:00-13:30.....**Lunch**

VIII. Engineering geophysics

工程地球物理

Session 34: ENGINEERING AND COAL-ENGINEERING

Chairs: Yibo Wang and Gang Yu

Date: Tuesday Morning, 18 April 2017

Location: Meeting Room No.2–Yifu Lecture Room, 1F Yifu Building

- 10:10-10:30.....**Coffee Break**
- 10:30-10:50.....**Revealing the study on electric-component CSAMT application to coal discovery in China** (Guo-qiang Xue, Shu Yan, Wei-ying Chen)
- 10:50-11:10.....**Study on optimization of Sampling Function for reduction of TEM Noise** (WU Xin, AO Pan, RAO Li-Ting, GUO Rui, FANG Guang-You)
- 11:10-11:30.....**Electrical Anisotropic Response of Water Conducted Zone in the Goaf Conducted Zone in the Goaf** (Jingcun YU Benyu SU)
- 11:30-11:50.....**Study on seismic spectral attribute for coal seam thickness prediction** (Zhongbin Tian, Jianqing Wang, Xiaodong Yang, Youyi Shen)
- 11:50-12:10.....**Pseudo wavefield extraction of MTEM data** (Hua-sen ZHONG, Guo-qiang XUE, Xiu LI)
- 12:10-13:30.....**Lunch**



Session 35: ENGINEERING AND COAL-ENGINEERING

Chairs: Zhiping Lin and Jianhu Gao

Date: Tuesday Afternoon, 18 April 2017

Location: Meeting Room No.2–Yifu Lecture Room, 1F Yifu Building

- 13:30–13:50.....**A comparison of different-mode fields generated from grounded-wire source**
(Zhou Nan-Nan*, Xue Guo-qiang, Hou Dong-yang, Zhenjun Ma)
- 13:50–14:10.....**Study on the feasibility of detecting sandstone water in coal floor based on seismo-electric effect** (Lian Liu*, Gongjin Zang, Zhihai Jiang, Atan Lv)
- 14:10–14:30.....**Research on Ground-Roadway detection technique based on direct current resistivity method** (Shuang-Shuang CHEN, Shu-Cai LIU*)
- 14:30–14:50.....**Transient electromagnetic response and inversion for Ramp current with multi-turn coils** (Haiyan Yang*, Xuhua Liu)
- 14:50–15:30.....**Coffee Break and Poster Session I**
- 15:30–15:50.....**A study of the transient electromagnetic responses for the Ovoid Zone massive sulfide-deposit model and for a fixed-loop configuration** (Jianhui Li, Colin G. Farquharson)
- 15:50–16:10.....**Full wave field finite difference modeling of tunnel space in polar coordinates**
(Yutao Liu, Jiangping Liu*, Fei Cheng, Ruidong Qin, Jingtao Xie)
- 16:10–16:30.....**The application of GPR spectral energy analysis in deep karst detection under the tunnel base** (Yaohua Li, Weiping Zhang, Xu Li)
- 17:20–18:30.....**Dinner**

Session 36: ENGINEERING AND COAL-ENGINEERING

Chairs: Gang Yu and Guoqiang Xue

Date: Wednesday Morning, 19 April 2017

Location: Meeting Room No.2–Yifu Lecture Room, 1F Yifu Building

- 08:30–08:50.....**TDR Phase Velocity Analysis for Measuring Apparent Dielectric Spectrum of Soil**
(Chih-Ping Lin, Yin Jeh Ngui* and Chun-Hung Lin)
- 08:50–09:10.....**The study of distribution of surface basalt in oil-bearing depression with magnetic survey** (Yang Zhanjun*, Lei Dong, Jiang Wenbo)
- 09:10–09:30.....**Monte Carlo Stochastic inversion of GPR parameters** (Nan Huai*, Zhaofa Zeng, Jing Li, Xueyu Zhao, Zhijun Huo, Jingyi Lin, Zhuo Liu)
- 09:30–09:50.....**The investigation of underground aquifer layer for oilfield sewage reinjection with TDEM** (Men Yuyu*, Yang Yunjian, and Zhu Yongshan)
- 09:50–10:20.....**Coffee Break**
- 10:20–10:40.....**Near-surface depth inspection on gravel-covered bridge foundations**
(Helsin Wang, Chih-Hsin Hu*, Sheng-Hsiung Hsieh, Yao-Chu Tsai)
- 10:40–11:00.....**The Application of Pseudo-Random Geoelectric Sounding Method in Urban Archaeological Exploration** (Ling Liu*, Ping Wang)

- 11:00–11:20.....**Enhance GPR diffracted waves and its applications** (Hongyan Shen, Yuhang Lei, Yueying Yan)
- 11:20–11:40.....**A moving target detection method based on Kalman filter and EMD for Through-Wall Radar** (Erqiao Song, Sixin Liu*, Qi Lu, Xiannan Wang, Rongqin He)
- 12:00–13:30.....**Lunch**

Session 37: ENGINEERING AND COAL-ENGINEERING

Chairs: Zhiping Lin and Kaijun Xu

Date: Wednesday Afternoon, 19 April 2017

Location: Meeting Room No.2–Yifu Lecture Room, 1F Yifu Building

- 13:30–13:50.....**Feasibility of Surface Wave Method in Quantitative Assessment of Ground Improvement by Jet Grouting: 3D Numerical Study** (C. P. Lin, C. H. Lin* and Y. C. Chang)
- 13:50–14:10.....**Monitoring and analysing of a controlled LNAPL spill using GPR** (Yingying Wang, Shuai Shao, Xiujun Guo*, Hao Ding)
- 14:10–14:30.....**Preconditioned Least-squares reverse-time migration with well-constrain regularization**
(Mengli Liu, Jianping Huang, Zhenchun Li, Chuang Li, Yingjun Ren)
- 14:30–14:50.....**Design and implementation of synchronous current output in the dual-source transmitter system** (Yao Yao, Chang-sheng Liu*, Hai-gen Zhou)
- 14:50–15:30.....**Coffee Break and Poster Session 2**
- 15:30–15:50.....**RGB Frequency Mixing Method Based on the Residual Impedance of Seismic Inversion**
(YANG Ruizhao, XU Chao, ZHANG Tian, LUO Yuxin, Li Pengpeng)
- 15:50–16:10.....**Application of Transient Electromagnetic Method in Surface Igneous Rocks Survey in Hainan** (Jiang Wenbo*, Yang Zhanjun, Lei Dong, Li Qing, Zang Xujiao)
- 16:10–16:30.....**The feasibility of TEM for identifying multilayer water-filled mine-out area**
(YAN Shu, XUE Junjie, QIU Wei-Zhong)
- 16:30–16:50.....**Multi-sphere Gravity Forward Modeling Based on MATLABGUI** (Bohan Zhang, Bohan Zhang*)
- 17:20–18:30.....**Dinner**



IX. Geophysics in coal engineering

煤矿工程地球物理

Session 38: ENGINEERING AND COAL-ENGINEERING

Chairs: Yibo Wang and Gang Yu

Date: Tuesday Morning, 18 April 2017

Location: Meeting Room No.2–Yifu Lecture Room, 1F Yifu Building

10:10–10:30.....**Coffee Break**

10:30–10:50.....**Revealing the study on electric-component CSAMT application to coal discovery in China** (Guo-qiang Xue, Shu Yan, Wei-ying Chen)

10:50–11:10.....**Study on optimization of Sampling Function for reduction of TEM Noise** (WU Xin, AO Pan, RAO Li-Ting, GUO Rui, FANG Guang-You)

11:10–11:30.....**Electrical Anisotropic Response of Water Conducted Zone in the Goaf Conducted Zone in the Goaf** (Jingcun YU Benyu SU)

11:30–11:50.....**Study on seismic spectral attribute for coal seam thickness prediction** (Zhongbin Tian, Jianqing Wang, Xiaodong Yang, Youyi Shen)

11:50–12:10.....**Pseudo wavefield extraction of MTEM data** (Hua-sen ZHONG, Guo-qiang XUE, Xiu LI)

12:10–13:30.....**Lunch**

Session 39: ENGINEERING AND COAL-ENGINEERING

Chairs: Zhiping Lin and Jianhu Gao

Date: Tuesday Afternoon, 18 April 2017

Location: Meeting Room No.2–Yifu Lecture Room, 1F Yifu Building

13:30–13:50.....**A comparison of different-mode fields generated from grounded-wire source** (Zhou Nan-Nan*, Xue Guo-qiang, Hou Dong-yang, Zhenjun Ma)

13:50–14:10.....**Study on the feasibility of detecting sandstone water in coal floor based on seismo-electric effect** (Lian Liu*, Gongjin Zang, Zhihai Jiang, Atan Lv)

14:10–14:30.....**Research on Ground-Roadway detection technique based on direct current resistivity method** (Shuang-Shuang CHEN, Shu-Cai LIU*)

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14:50–15:30.....**Coffee Break and Poster Session I**

15:30–15:50.....**A study of the transient electromagnetic responses for the Ovoid Zone massive sulfide-deposit model and for a fixed-loop configuration** (Jianhui Li, Colin G. Farquharson)

15:50–16:10.....**Full wave field finite difference modeling of tunnel space in polar coordinates** (Yutao Liu, Jiangping Liu*, Fei Cheng, Ruidong Qin, Jingtao Xie)

16:10–16:30.....**The application of GPR spectral energy analysis in deep karst detection under the tunnel base** (Yaohua Li, Weiping Zhang, Xu Li)

17:20–18:30.....**Dinner**

Session 40: ENGINEERING AND COAL-ENGINEERING

Chairs: Gang Yu and Guoqiang Xue

Date: Wednesday Morning, 19 April 2017

Location: Meeting Room No.2–Yifu Lecture Room, 1F Yifu Building

08:30–08:50.....**TDR Phase Velocity Analysis for Measuring Apparent Dielectric Spectrum of Soil** (Chih-Ping Lin, Yin Jeh Ngui* and Chun-Hung Lin)

08:50–09:10.....**The study of distribution of surface basalt in oil-bearing depression with magnetic survey** (Yang Zhanjun*, Lei Dong, Jiang Wenbo)

09:10–09:30.....**Monte Carlo Stochastic inversion of GPR parameters** (Nan Huai*, Zhaofa Zeng, Jing Li, Xueyu Zhao, Zhijun Huo, Jingyi Lin, Zhuo Liu)

09:30–09:50.....**The investigation of underground aquifer layer for oilfield sewage reinjection with TDEM** (Men Yuyu*, Yang Yunjian, and Zhu Yongshan)

09:50–10:20.....**Coffee Break**

10:20–10:40.....**Near-surface depth inspection on gravel-covered bridge foundations** (Helsin Wang, Chih-Hsin Hu*, Sheng-Hsiung Hsieh, Yao-Chu Tsai)

10:40–11:00.....**The Application of Pseudo-Random Geoelectric Sounding Method in Urban Archaeological Exploration** (Ling Liu*, Ping Wang)

11:00–11:20.....**Enhance GPR diffracted waves and its applications** (Hongyan Shen, Yuhang Lei, Yueying Yan)

11:20–11:40.....**A moving target detection method based on Kalman filter and EMD for Through-Wall Radar** (Erqiao Song, Sixin Liu*, Qi Lu, Xiannan Wang, Rongqin He)

12:00–13:30.....**Lunch**

Session 41: ENGINEERING AND COAL-ENGINEERING

Chairs: Zhiping Lin and Kaijun Xu

Date: Wednesday Afternoon, 19 April 2017

Location: Meeting Room No.2–Yifu Lecture Room, 1F Yifu Building

13:30–13:50.....**Feasibility of Surface Wave Method in Quantitative Assessment of Ground Improvement by Jet Grouting: 3D Numerical Study** (C. P. Lin, C. H. Lin* and Y. C. Chang)

13:50–14:10.....**Monitoring and analysing of a controlled LNAPL spill using GPR** (Yingying Wang, Shuai Shao, Xiujun Guo*, Hao Ding)

14:10–14:30.....**Preconditioned Least-squares reverse-time migration with well-constrain regularization** (Mengli Liu, Jianping Huang, Zhenchun Li, Chuang Li, Yingjun Ren)

14:30–14:50.....**Design and implementation of synchronous current output in the dual-source transmitter system** (Yao Yao, Chang-sheng Liu*, Hai-gen Zhou)

14:50–15:30.....**Coffee Break and Poster Session 2**



- 15:30–15:50.....**RGB Frequency Mixing Method Based on the Residual Impedance of Seismic Inversion** (YANG Ruizhao, XU Chao, ZHANG Tian, LUO Yuxin, Li Pengpeng)
 15:50–16:10.....**Application of Transient Electromagnetic Method in Surface Igneous Rocks Survey in Hainan** (Jiang Wenbo*, Yang Zhanjun, Lei Dong, Li Qing, Zang Xujiao)
 16:10–16:30.....**The feasibility of TEM for identifying multilayer water-filled mine-out area** (YAN Shu, XUE Junjie, QIU Wei-Zhong)
 16:30–16:50.....**Multi-sphere Gravity Forward Modeling Based on MATLABGUI** (Bohan Zhang, Bohan Zhang*)
 17:20–18:30.....*Dinner*

X. Rock physics and petrophysics 岩石物理

Session 42: ROCK-PETROPHYSICS

Chairs: Kyle Spikes and Wenkai Lu

Date: Tuesday Morning, 18 April 2017

Location: Meeting Room No.7 – R377, 3F Block-C Engineering Building

- 10:10–10:30.....*coffee break*
 10:30–10:50.....**Effects of pore structures on electrical properties of tight sandstones based on digital rock technology** (Weichao Yan*, Jianmeng Sun, Likai Cui, Jinyan Zhang, Huaimin Dong)
 10:50–11:10.....**Laboratory observation and prediction of ultrasonic velocity dispersion of reservoir sandstones induced by fluid viscosity** (YANG Zhiqiang*, HE Tao**, ZOU Changchun, REN Keying)
 11:10–11:30.....**Permeability modeling method of NMR in low porosity and low permeability sandstone based on the fractal theory** (Li Haitao*, Deng Shaogui)
 11:30–11:50.....**Characterize the pore microstructures of shale formation by using AFM** (Kouqi liu*, Mehdi Ostadhassan)
 11:50–12:10.....**Bayesian inversion of well logs for petrophysical properties estimation** (Ruidong Qin, Heping Pan*, Peiqiang Zhao, Yutao Liu, Chengxiang Deng)
 12:10–13:30.....*Lunch*

Session 43: ROCK-PETROPHYSICS

Chairs: Cairui Shao and Jianchao Cai

Date: Tuesday Afternoon, 18 April 2017

Location: Meeting Room No.7 – R377, 3F Block-C Engineering Building

- 13:30–13:50.....**Ultrasonic experiments and wave velocity prediction by Gassmann equation using the artificial sandstones made under different pressing pressures** (Liang Su*, Shangxu Wang, and Dan Zhou)

- 13:50–14:10.....**Effects of inhomogeneous rock properties on P-wave seismic velocity and attenuation in patchy-saturated model** (Dan Zhou*, Shangxu Wang, Liang Su)
 14:10–14:30.....**Reservoir Parameter Prediction of the Digital core Based on Inverse modeling method** (Ying Zheng*, Xingyao Yin, Zhaoyun Zong)
 14:30–14:50.....**Shear wave velocity estimation based on the rock physics model with the multi-variables information constraint** (Qijie Zhou, Xingyao Yin, Danping Cao, Wenguo Sun, Huixin Wang)
 14:50–15:30.....*Coffee Break and Poster Session 1*
 15:30–15:50.....**Stress-dependent anisotropy in transversely isotropic rocks under triaxial stress conditions** (Lanhua Huang*, Guangzhi Zhang, Jiajia Zhang)
 15:50–16:10.....**Modeling elastic anisotropy for triaxially stressed rocks: Theoretical and laboratory examination** (Lanhua Huang*, Guangzhi Zhang, YunWei Tang, Xiuwei Wang)
 16:10–16:30.....**Rock physics analysis of pore structure variation associated with sea level change in a deeply buried carbonate platform** (Qifei Huang*, Yuefeng Sun, Qifeng Dou)
 17:20–18:30.....*Dinner*

Session 44: ROCK-PETROPHYSICS

Chairs: Jianhua Geng and Feng Zhang

Date: Wednesday Morning, 19 April 2017

Location: Meeting Room No.7 – R377, 3F Block-C Engineering Building

- 08:30–08:50.....**Petrophysical and geological study of the seismically non-reflective Carbon Leader Reef: Witwatersrand Basin** (Nomqhele Z. Nkosi*, Musa S.D Manzi, Gillian R. Drennan, Halil Yilmaz)
 08:50–09:10.....**Study of 4D multicomponent forward model in porous and fractured medium during CO2 Sequestration** (Yang Yang*, Jinfeng Ma)
 09:10–09:30.....**Seismic reflection dispersion resulting to wave-induced fluid flow in patchy saturated rocks** (Jingkang Yang*, Jianhua Geng, Luanxiao Zhao)
 09:30–09:50.....**A Method for estimating shear wave velocity using multi mineral model** (Cairui Shao*, Xingyao Yin, Fuming Zhang, Guochen Wu)
 09:50–10:20.....*coffee break*
 10:20–10:40.....**Extension of White layered model for the rock saturated with three-phase fluid** (Qazi Adnan Ahmad*, Guochen Wu, Zong Zhaoyun, Wu Jianlu, Li Kun)
 10:40–11:00.....**Deformation of digital images and trends of porosity versus numerical elastic properties** (Kyle T. Spikes and Morteza E. Naraghi)
 11:00–11:20.....**Seismic rock physics characterization of fractures in anisotropic shale reservoirs** (Zhiqi Guo*, Xinhui Deng, Cai Liu, Xiwu Liu, Yuwei Liu)
 11:20–11:40.....**Rock physics modeling and anisotropy parameters inversion for shale reservoirs** (Zhiqi Guo*, Qibin Zhang, Cai Liu, Xiwu Liu, Yuwei Liu)
 12:00–13:30.....*Lunch*



Session 45: ROCK-PETROPHYSICS

Chairs: Kyle Spikes and Xiwu Liu

Date: Wednesday Afternoon, 19 April 2017

Location: Meeting Room No.7 – R377, 3F Block-C Engineering Building

- 13:30–13:50.....**Seismic Rock Physics Forward Modeling Workflow and the Application for Direct Hydrocarbon Detection in Carbonate Karst Cave Reservoir** (Zhiliang.Ming, Zongjie Li, Frank Chen, Haiying Li, Yi Liu, Gongcheng Lin, Wen Yuan)
- 13:50–14:10.....**Stochastic inversion of reservoir properties for anisotropic shales based on rock physics model** (Bing Zhang, Cai Liu, Zhiqi Guo*, Xiwu Liu, Yuwei Liu)
- 14:10–14:30.....**Based on the approximations of rock modulus to estimate fluid compressibility in sandston** (Ashanbieke Wurenbieke*, Zhenchun Li, Song Qingyang, Min Zhang, Junhong Wu)
- 14:30–14:50.....**Sensitivity Studies for Enhancing Condensate Recovery of Gas Condensate Reservoir** (Bilal Shams*, Jun Yao, Kai Zhang, Lei Zhang)
- 14:50–15:30.....**Coffee Break and Poster Session 2**
- 15:30–15:50.....**Impact of Clay Content on Elastic Anisotropy of Synthetic Shale** (Fei Gong*, Bangrang Di, Jianxin Wei, Pinbo Ding, Chongna Liu, He Li, Shuyuan Qin, Tingdong Xing)
- 15:50–16:10.....**Estimation of anisotropy parameters for shales based on an improved rock physics model** (Feng Zhang, Keran Qian and Xiang-yang Li)
- 16:10–16:30.....**Intrinsic absorption and scattering attenuation from laboratory ultrasonic measurements** (Hao Zhou*, Li-Yun Fu)
- 16:30–16:50.....**The poro-acoustoelasticity theory with compliant pores of fluid-saturated rocks** (Bo-Ye Fu, Li-Yun Fu*)
- 17:20–18:30.....**Dinner**

Session 46: ROCK-PETROPHYSICS

Chairs: Fanchang Zhang and Daxing Wang

Date: Thursday Morning, 20 April 2017

Location: Meeting Room No.7 – R377, 3F Block-C Engineering Building

- 08:30–08:50.....**Numerical calculation of anisotropic parameter of tight sandstone with fractures** (Guoliang Yan*, Enli Wang, Wanjin Zhao)
- 08:50–09:10.....**Lithology Identification of Complex Carbonates Based on Hidden Markov Model** (Molei Zhao*, Shichen Gao)
- 09:10–09:30.....**Consistency study of mercury intrusion and nuclear magnetic resonance in pore structure characterization for tight oil –A case study in Sichuan Basin, China** (Yunlong Liu*, Yuanzhong Zhang)

- 09:30–09:50.....**The ultrasonic response of numerical simulation and analysis of scattering characteristics in digital core for shale reservoir** (WANG Zhi-Wei, FU Li-Yun, ZHANG Yan, WEI Wei)
- 09:50–10:20.....**Coffee break**
- 10:20–10:40.....**The effect of grain surface energy on elastic wave velocity prediction of sandstone saturated by oil and brine** (Weitao Sun*, Fansheng Xiong, Hong Cao, Minghui Lu, Xinfei Yan, Zhifang Yang)
- 10:40–11:00.....**Pore shape substitution for pore structure characterization** (Jiajia Zhang*, Hongbing Li)
- 11:00–11:20.....**The Study of Brittleness in Shale based on the Effective Medium Model** (Xiaoyu Zhang, Qizhen Du*, Kun Zhu)
- 11:20–11:40.....**Characteristic of seismic wave propagation in the media exhibiting mesoscopic flow mechanism** (Tian-wei Du*, Guo-chen Wu)
- 12:00–13:30.....**Lunch**

Session 47: ROCK-PETROPHYSICS

Chairs: Chengyu Sun and Jianhua Geng

Date: Thursday Afternoon, 20 April 2017

Location: Meeting Room No.7 – R377, 3F Block-C Engineering Building

- 13:30–13:50.....**Stress-Associated Intrinsic and Scattering Attenuation from Laboratory Ultrasonic Measurements on Shales** (Junhua Hu*, Li-Yun Fu, Wei Wei, Jun Su, Yan Zhang)
- 13:50–14:10.....**Developing a new technique for estimating NMR T1 and T2 relaxations** (Naser Golsanami*, Jianmeng Sun)
- 14:10–14:30.....**Characterization of Petrographic and Petrophysical Properties from 3D Digital Rock Images: A Case Study on Beach-bar Sandstone of Boxing Sag, East China** (Muhammad Aleem ZAHIDa,b,*, Dong CHUNMEIa,c, Alexandra N. GOLABd,Chengyan LINA, Xianguo ZHANGa, Muhammad Jawad,MUNAWARA, Cunfei MAa, Lydia KNUFINGd)
- 14:30–14:50.....**An experimental study among P-wave velocity of sandstones, pressures and water saturation in Tuha oilfield, Xinjiang, China** (Huaimin Wang*, Jiagen Hou)
- 14:50–15:30.....**Coffee Break and Poster Session 3**
- 15:30–15:50.....**Pore Size Distribution and Reservoir Characterization: Evaluation for the Eocene Beach-Bar Sequence, Dongying Depression, China** (Muhammad Aleem Zahida,b,*, Dong Chunmeia,c, Alexandra N. ,Golabd, Chengyan Lina, Xianguo Zhanga,Xinmin Gee, Wu Songtaof, Muhammad Jawad Munawara, Cunfei Maa)
- 15:50–16:10.....**Application of rock physics inversion for porosity determination in coalbed methane reservoirs: A case study from Qinshui basin in China** (Naser Golsanami*, Jianmeng Sun)
- 16:10–16:30.....**Seismic inversion of anisotropy parameters for fractured reservoirs by the simulated annealing and particle swarm optimization methods** (Teng Luo, Zhiqi Guo*, Xuan Feng, Xiwu Liu, Yuwei Liu)



16:30–16:50.....Reservoir parameter prediction based on a constrained inverse rock physics modeling method (Qian Liu *, Ning Dong, Yuxin Ji, Tiansheng Chen)

17:00–17:20..... Conference Concludes (room1)

17:20–18:30.....Dinner

XI. Unconventional geophysics

非常规地球物理

Session 48: UNCONVENTIONAL

Chairs: Chuntao Liang and Yuan Gao

Date: Wednesday Afternoon, 19 April 2017

Location: Meeting Room No.3–R365, 3F Block-C Engineering Building

13:30–13:50.....Application of the anisotropic pre-stack time migration of the shale-gas seismic exploration in Changning , Sichuan (Li Xiang, Xiong Xiaojun, Liu Yang, Jian Shikai, He Zhenhua)

13:50–14:10.....Use of Ground Penetrating Radar to Map the Tree Roots (Xiaolong Liang*)

14:10–14:30.....Optimization and acceleration of joint inversion of microseismic location and focal mechanism (Yangyang Yu*, Chuntao Liang)

14:30–14:50.....Seismic geo-steering technology of horizontal well and its application in Fuling shale gas field (Peng Liao*, Shugui Zha, Shuishan Zhang, Qijun Liu, Ping Deng)

14:50–15:30.....Coffee Break and Poster Session 2

15:30–15:50.....The application of gas hydrate saturation calculation and analysis using experimental measurement (Yanliang Wu*, Jun Zhao)

15:50–16:10.....New model to evaluate the Brittleness in shale formation (Lixi Liang, Xiangjun Liu, Jian Xiong*, Tao Wu, Yi Ding*)

17:20–18:30.....Dinner

Session 49: UNCONVENTIONAL

Chairs: Jianping Huang and Baoli Wang

Date: Thursday Morning, 20 April 2017

Location: Meeting Room No.3–R365, 3F Block-C Engineering Building

08:30–08:50.....Instantaneous quality factor extraction with applications to tight gas reservoir (Naihao Liu, Jinghui Gao*, Qian Wang)

08:50–09:10.....Invited: Shale gas reservoir characterization and sweet spot prediction in China (Gang Yu*, Yusheng Zhang, Ximing Wang, Xing Liang, Wei Liu, Rui Guo)

09:10–09:30.....Using 3D seismic data to predict the sweet spots in shale reservoir: A case study of Lower Silurian Longmaxi Formation in W204 block, Sichuan Basin (Sheng Chen, Wenzhi Zhao, Yonglin Ouyang, Qingcai Zeng, Qing Yang, Huaxing Hou, Shaohua Gai, Shihai Bao, Xinyu Li)

09:30–09:50.....The use of magnetic field mapping at the On-site inspections (Li Xinjun, Gong Bing, Tang Mu'en,Huang Dan,Li Cheng)

09:50–10:20.....Coffee Break

10:20–10:40.....A surface microseismic monitoring system with flexible wireless network configurations (Weibo Wang*, Zhiwei Wang, Chenxi Sun,Huagang Zhao, Zelin Hou,Baojuan Li)

10:40–11:00.....Geomechanical model of effective orthorhombic media for single vertically fractured VTI layer (Xiaolong Zhao*, Guochen Wu, Luo Ji, Zeyuan Du)

11:00–11:20.....Microseismic velocity model inversion using neighbourhood algorithm (Yuyang Tan*, Haijiang Zhang, Chuan He)

11:20–11:40.....Natural Fractures Effects on Hydraulic Fracturing: A Case for Shale Gas (Lei Gao,Wei Liu*,Gang Yu,Gulan Zhang)

12:00–13:30.....Lunch

Session 50: UNCONVENTIONAL

Chairs: Xuri Huang and Haijiang Zhang

Date: Thursday Afternoon, 20 April 2017

Location: Meeting Room No.3–R365, 3F Block-C Engineering Building

13:30–13:50.....Seismic Multiattributes Fuse Method to Predict Shale Play Sweet Spots (Lei Gao,Wei Liu*,Gang Yu,Yusheng Zhang)

13:50–14:10.....Stress analysis Based on Hydraulic Fracturing Induced Seismicity (Chuntao Liang *, Yangyang Yu, Xuben Wang, Cheng Yin, Furong Wu)

14:10–14:30.....The Application of Real-time MicroSeismic Monitoring Technique in Hydraulic Fracturing of Shale Gas Reservoir (Hao Huo*, Peng Chen, Le Yue)

14:30–14:50.....Interpretation of Complex-Step-Finite-Difference Method and It's Implementation with Spectral Element Method (Su Zeming*, Gao Jinghui)

14:50–15:30.....Coffee Break and Poster Session 3

15:30–15:50.....The Temperature Changes before and after the 2008 Wenchuan Earthquake and their implication to Continental Tectonic and earthquake Process (Huang Fuqiong*, Ma Yuchuan)

15:50–16:10.....Anisotropic seismic forward modeling for hydraulic-fractured shale (Meiling Liu*, Feng Zhang, Xiang-Yang Li,)

16:10–16:30.....2W1H acquisition techniques for tight sands gas in loess area China (Zhang Jianjun*, Liu Hongxing, Liu Cunxi, Li Yifan, Hu Chaojun, He Xiangdong and Xiao Mengxiong)

17:00–17:20.....Conference Conclude (room1)

17:20–18:30.....Dinner



XII. Solid Earth geophysics

固体地球物理

Session 51: SOLID EARTH

Chairs: Yinshuang Ai and Jianguo Song

Date: Tuesday Morning, 18 April 2017

Location: Meeting Room No.8 – R757, 7F Block-C Engineering Building

10:10–10:30.....*coffee break*

10:30–10:50.....**Invited: Evidence for crustal root beneath the Paleoproterozoic collision zone in the northern Ordos block, North China** (Wang Chun-Yong*, Eric Sandvol, Lou Hai, Zhu Lupei, Wang Xingchen)

10:50–11:10.....**Gravity change caused by crustal movement: a case study in the southeast Tibetan Plateau** (Wang Jiawei*, Shen Chongyang, Xuan Songbai)

11:10–11:30.....**High-resolution tomography of the Northeast Asia: New insight into the Pacific Plate subduction** (Jincheng Ma, Tian You, Cai Liu, Hongxiang Zhu)

11:30–11:50.....**The inversion of three-dimensional density structures of the Xiaojiang Fault and adjacent area** (Yang Guang-liang, Shen Chong-yang, Wu Gui-ju, Tan Hong-bo, Wang Jia-pei)

11:50–12:10.....**Fiber Bragg grating strainmeter for crust deformation observation and earthquake monitoring** (Wentao Zhang*, Wenzhu Huang, Fang Li)

12:10–13:30.....*Lunch*

Session 52: SOLID EARTH

Chairs: Kaijun Xu and Yuan Gao

Date: Tuesday Afternoon, 18 April 2017

Location: Meeting Room No.8 – R757, 7F Block-C Engineering Building

13:30–13:50.....**Analysis of the Effective Elastic Thickness of the Lithosphere in China** (Zhezhe Lu*, Chun-Feng Li)

13:50–14:10.....**Numerical Modeling of Deformation Modes of Overriding Plate in Ocean-Continent Subduction** (Yanan SHI, Dongping WEI, Zhonghai LI, Mengxue LIU)

14:10–14:30.....**Vertical tectonic stress deduced by gravity isostasy theory: an example in eastern margin of Tibetan Plateau** (She Ya-Wen*, Fu Guang-Yu, Wang Zhuo-Hua, Gao Yuan)

14:30–14:50.....**Determining the permeability of hydrate-bearing slity-fine sands with water transient flow** (Lele Liu*, Hongyuan Zhang, Changling Liu, Chengfeng Li, Jianye Sun, Qingguo Meng)

14:50–15:30.....*Coffee Break and Poster Session 1*

15:30–15:50.....**Complex seismic anisotropy beneath western Tibet and its geodynamic implications** (Jing Wu*, Zhongjie Zhang, Fansheng Kong, Bin B. Yang, Youqiang Yu, Kelly H. Liu, Stephen S. Gao)

15:50–16:10.....**The crust structure of the North-South earthquake belt in China revealed from integrated analyses of the deep seismic soundings and gravity data** (Yang Zhao*, Lianghai Guo, Lei Shi)

16:10–16:30.....**The crustal anisotropy in North-South seismic zone using the data from temporary seismic array** (Yi Zhang, Yuan Gao)

16:30–16:50.....**3D inversion of full gravity gradient tensor data in spherical coordinate system using local north-oriented frame** (Yi Zhang*, Yunlong Wu, Hui Li, Xinlin Zhang, Jianguo Yan, Guiju Wu, Jiawei Wang)

17:20–18:30.....*Dinner*

XIII. Geophysical big data analysis

地球物理大数据分析

Session 53: BIG DATA

Chairs: Zhongpin Qian and Wen Yin

Date: Thursday Morning, 20 April 2017

Location: Meeting Room No.2–Yifu Lecture Room, 1F Yifu Building

08:30–08:50.....**Research and Application of XFS file system in Seismic data process** (Sun Meiling*)

08:50–09:10.....**High Density wide azimuth 3D Seismic data Processing technique and its applications** (Li Daoshan*, Cao Mengqi)

09:10–09:30.....**Two-dimensional magnetotelluric inversion based on GPU** (Wei Du*, Xiaoping Wu)

09:30–09:50.....**Quality control and archiving issues of seismic data processing with massive data volumes** (Hu Shuhua*, Wang Xiaowei, Sun Jiaqing, Liu Weiming, Wang Jing and Ling Yue)

09:50–10:20.....*Coffee Break*

10:20–10:40.....**An efficient scheme for frequency-domain modelling of scalar wave equation** (Si Jiege, Li Xiaofan, Li Bingfei, Zhang Huan and Lu Lu)

10:40–11:00.....**Machine Learning in Rock Facies Classification: An Application of XGBoost** (Licheng Zhang, Cheng Zhan)

11:00–11:20.....**Double optimal checkpointing method for viscoacoustic reverse time migration** (Binghong He*, Guochen Wu†)

11:20–11:40.....**Prestack wide azimuth seismic data analysis and application** (Li Lei*, Wan Zhonghong, Tao Chunfeng and Li Xiangwen)

12:00–13:30.....*Lunch*



Poster Session 1

- P01 Shear Velocity Estimation based on Rayleigh-wave Inversion** (Lieqian Dong*, Yimeng Zhang, Kui Zhang)
- P02 A time domain filtering by Controlled beam migration method** (Guowei Ren*, Zhenchun Li, Wenjun Cao, Jianwen Wu)
- P03 Quantitative analysis method of near-surface based on generalized Lippmann-Schwinger equation** (Bin Liu, Li-Yun Fu*, Gaoxiang Chen)
- P04 Mixed-phase wavelet estimation using trispectrum with 3D window function** (Shuang Wang*, Jingye Li, Xiaohong Chen, Xiong Ma, Yanxin Zhou)
- P05 Challenges of Converted Wave Processing in Shallow Water Environment of U.A.E.: Noise Attenuation and Converted-Wave Imaging** (Haoran Guo*, Yuefeng Sun)
- P06 The forward research on the acquisition geometry of surface microseismic monitoring** (Chaofa Ren*, Haibo Zhao, Baijun Chen, Shengrui Zhang)
- P07 Analysis of oil and gas reservoir Prospecting capability by borehole-surface electromagnetic method based on 3d numerical simulation** (Xinxin Qu)
- P08 Joint inversion of 3D VTI parameters using the first arrival travelttime tomography** (Baihang Zhu*, Kai Zhang, Zhenchun Li)
- P09 Compressed sensing KSVD dictionary learning method application in seismic denoising** (Liming Lin*, Guangzhi Zhang, Junkang Li, Chen Jin, Liu Junzhou)
- P10 Microseismic forward modeling and polarization characteristics analysis in viscoelastic anisotropic media based on different focal mechanisms** (YAO Zhen-an*, SUN Cheng-yu)
- P11 Convolution based multi-scale envelope inversion** (Chao Cui*, Jianping Huang)
- P12 The generalized energy ratio method for Q estimation** (Xiong Ma*, Guofa Li, Hequn Li)

Poster Session 2

- P01 3D first-arrival travelttime computation in orthorhombic media using dynamic programming** (Jiangtao Hu*, Junxing Cao, Huazhong Wang)
- P02 On vertical resolution for seismic acquisition geometries in complex 3D media** (Jun Su, Li-Yun Fu*, Wei Wei, Weijia Sun, Jun-Hua Hu)
- P03 Acoustic Responses of Gas Hydrates Formation in Vertical Gas Migration System** (Qingtao Bu*, Gaowei Hu, Yuguang Ye, Changling Liu, Chengfeng Li, Jiasheng Wang)
- P04 Unstructured finite-element method using second order interpolation for MT anisotropic media and one anisotropic coast model study** (Xin Hui*, Xiaoping Wu)
- P05 Wave equation illumination analysis in TTI media based on pure-p wave equation** (Xiaozhang Li*, Jianwei He*, Bing Liu*, Wenxiang Zhang*)
- P06 Radar-based Method to Improve the Accuracy of OBN Position in Deep water** (Cao Mingqiang*, Chen Haolin, Mao hejiang, Yu Shaopeng, Liu Yongjun)
- P07 Research on dynamic process of desorption of coalbed methane** (Jiang Bici, Wang Kaibin)

P08 Spectral sparse reflectivity inversion based on compressed sensing

(Liming Lin*, Guangzhi Zhang, Ying Zheng, Pei Zhonglin Liu, Junzhou, LiuZhenfeng)

P09 Seismic prediction of CO2 flooding range in G89-4 well block (Hou Jing, Zhang Junhua, Li Junlin, Zhang Xiaohui, Tan Mingyou, Qu Zhipeng)

P10 McMC-based nonlinear AVAZ direct inversion for fracture weaknesses (Xinpeng Pan*, Guangzhi Zhang, Huaizhen Chen)

P11 Thin gas reservoir detection using high resolution spectra attenuation attributes (Bingyang Liu*, Jianhu Gao, Shengjun Li)

P12 High resolution seismic prediction of thin sandstone under gypsum-salt in the YUDONG area of the TABEL uplift (JiLong Zhao, JunPeng Wang, QingLu Zeng, Nan Huang)

P13 Seismic response characteristics and identification of different types of karst collapse in Tahe oil field, Tarim Basin(YANG Ruizhao, JIN Shenglin, ZhangTian, LUO Yuxin, MENG Zhangwu, DENG Lijun)

Poster Session 3

- P01 Research of the dry modulus of the unconsolidated sandstone** (Guowei Ren*, Zhenchun Li, Wenjun Cao, Bingtao Wei)
- P02 Investigating pore geometry and topology, porosity exponent and permeability of sandstone and carbonate** (Haitao Wang*)
- P03 Rock Physics for Exploring Potential Sand Body with Limited Data** (Xu Sun*, Shizhen Ke, Chengfang Yin, Zhengming Kang, Shutong Zheng)
- P04 A weakness of FMM raypath and a suggested method** (Fengxue Zhang*)
- P05 Based on wave equation VSPelastic parameters inversion using simulated annealing algorithm** (Xuanying han*, Xingyao Yin, Danping Cao, Kai Liang)
- P06 Origin of intraplate volcanism in northeast China from Love wave constraints** (Yuanyuan V. Fu*, Yuan Gao, Aibing Li, Lun Li, Yutao Shi, Yi Zhang)
- P07 The structure and anisotropy of the crust in South China from ambient noise** (Qiong Wang*, Yuan Gao, Yutao Shi)
- P08 The characteristics and tectonic implications of electrical structure beneath the Puer area** (Yuanzhi Cheng *, Ji Tang, Xiaobin Chen, Zhonghe Pang, Zeyi Dong)
- P09 Seismic azimuthal anisotropy beneath the eastern United States and its geodynamic implications** (Bin B. Yang*, Yunhua Liu, Haider Dahm, Kelly H. Liu, Stephen S. Gao)
- P10 Magnetotelluric constraints on the Late Mesozoic rifting and magmatism in Southeast China** (Shan Xu, Xiangyun Hu, Martyn Unsworth)
- P11 Study on Electromagnetic Characteristics of Laboratory Methane Hydrate Physical Model Based on Ground Penetrating Radar** (Bingrui DU, Dawei Bai, Hui Fang, Penghui Zhang, Qinyin Lv)
- P12 Fracture parameters inversion based on perturbation elastic impedance** (Jie Tang *, Guochen Wu, Ji Luo)



 **EXHIBITOR DIRECTORY**
展商介绍

Booth NO.1

GME and Geochemical Surveys, BGP Inc., CNPC

中国石油集团东方地球物理勘探有限责任公司综合物化探处

BGP NON-SEISMIC SURVEYS is the biggest non-seismic service center around the world to provide professional competitive services of gravity, magnetic, electromagnetic, geochemical surveys with state of art techniques in the data acquisition, processing, interpretation, comprehensive study and method innovation. Up to now, we can not only provide the core business of oil and gas exploration, but also do other kinds of business in oil and gas field development, mineral exploration, unconventional resources exploration, groundwater investigation and geotechnical engineering surveys at home and abroad. BGP set up an international marketing network with base stations in the Middle East, South America, Central Asia, North Africa and East Africa to expand to other areas around world. We have provided our services for at least 50 international oil companies in more than 20 countries.

中国石油集团东方地球物理勘探有限责任公司综合物化探处，是全球最大的重力、磁力、电法、地球化学勘探与综合地质研究服务中心，在数据采集、资料处理、成果解释、综合研究、科技创新等方面处于国际领先水平。目前已形成以石油勘探为主，油气田开发、固体矿产勘查、非常规能源勘查、水资源勘查及工程地质勘查为辅的六大服务领域，业务遍及海内外，建成了以中东、南美、中亚、北非和东非为核心辐射全球的服务营销网络，已在20多个国家为50多家国际油公司提供过服务。

Booth NO.2

Saudi Aramco Beijing Research Center (BRC)

沙特阿美北京研究中心

Establishing and sustaining a global research and technology presence is a key enabler of Saudi Aramco's drive to achieve leadership across its technology portfolios. The Beijing Research Center (BRC) is the latest addition of Aramco's global research networks that leverages scientific expertise utilizing top global talents. The center's main objective is to enhance Aramco's profitability and productivity in a cost-effective, timely and collaborative manner. This objective will be achieved by meticulously conducting advanced research activities that ultimately introduce new proven technologies and provide specialized innovative technical services. BRC focuses exclusively on three major research areas: geology, geophysics, and production chemicals for enhanced oil recovery. The center was inaugurated by H.E. Ali Al-Naimi, former Minister of Petroleum & Mineral Resources on April 29th, 2015, government officials and business partners from Saudi Arabia and China attended the opening.

建立并维持全球研究和技术体系是沙特阿美在技术组合方面占据领先地位的核心驱动力。在中国成立的北京研发中心是阿美公司全球研发体系的最新扩展。该研发中心吸引全球顶级研发人才，着力于在经济性、时效性和协作性等方面提高阿美公司的盈利能力和生产效率。我们通过开展研发活动，推出新技术，并提供专业化的创新技术服务来实现这一目标。北京研发中心的研究主要涵盖地质、地球物理和油藏工程等三个领域，围绕着这些领域的创新技术研究最终将带来更丰富的油气勘探方法和更高的采收率。2015年4月29日，沙特阿拉伯前石油与矿产资源大臣纳伊米阁下为北京研发中心揭幕并剪彩，同时出席仪式的还有沙特与中国政府官员及公司合作伙伴。

Booth NO.3 to NO.5

Beijing Zhongheng Lihua Petroleum Technology Research Institute

北京中恒利华石油技术研究所

The company, Beijing Zhongheng Lihua Petroleum Technology Research Institute, continues to be committed to research and development of high-precision prediction technology for oil and gas reservoirs. It has a variety of software products developed independently, such as SMI for Seismic-indicator Model Inversion, G&G for 3D seismic sedimentology interpretation, SEINO for seismic facies and palaeogeomorphology analysis, HGT for geological tracking and adjustment of horizontal wells, and etc. The company is not only the owner of serial innovative technologies including visualization of mass data from 3D ultralarge seismic merging survey areas, fine imaging of reservoirs, decision center of panoramic exploration data, but also the developer of professional softwares.

SMI, Seismic-indicator Model Inversion software, the representative software of the company, is the latest high-precision inversion technique for thin bed. This is the only inversion software modeling in non-spatial domain in the oil and gas industry, based on innovative seismic-indicator simulation algorithm, which has significantly improved the precision and reliability of thin bed inversion. SMI is especially suitable for the fine reservoir characterization of thin bed in mature exploration areas and dense well pattern areas, which is a major breakthrough in the thin-bed high resolution inversion.

北京中恒利华石油技术研究所一直致力于油气储层高精度预测技术研发。现拥有高分辨率“地震波形特征指示反演软件(SMI)”、“三维地震沉积学解释软件(G&G)”、“地震相及古地貌分析软件(SEINO)”、“水平井地质跟踪调整软件(HGT)”等多种软件产品，是储层精细成像、超大三维连片的海量地震数据可视化、全景勘探数据决策中心等一系列创新技术的拥有者和专业软件开发商。其代表性软件-地震波形特征指示反演SMI (Seismic-indicator Model Inversion) 是最新推出的高精度薄层反演技术。基于创新的“波形指示模拟”算法，业界唯一“非空间域建模”反演软件，大幅度提高了薄层反演的精度和可靠性，特别适用于成熟探区、密井网区薄储层精细表征，是薄层高分辨率反演的重大突破。



Booth NO.6

Shandong Tianyuan Information Technology Co., Ltd.

山东天元信息技术股份有限公司

TIANYUAN is a high technology company who is major in engineering survey, detection of underground pipelines, and construction of GIS systems. TIANYUAN developed a system which can build 2D and 3D GIS systems for oilfields according to various requirements, and takes a leading market share in this field in China. TIANYUAN has developed a microseismic monitoring system and data processing software, which can be used for microseismic monitoring of hydraulic fracturing and long-term microseismic monitoring for reservoirs. TIANYUAN is the authorized exclusive representative and service provider in China for PNN well logging system of HOTWELL Inc. USA. TIANYUAN has branches or representatives in almost all oilfields in China, and we have a good foundation in cooperation with our customers.

山东天元信息技术股份有限公司是专业从事工程测量、地下管线探测、地理信息系统建设的专业技术公司，是新三板挂牌企业，拥有自主开发的油田二维、三维地理信息建设系统，在全国油田市场占有领先地位。公司还开发了具有自主知识产权的微地震监测和数据处理系统，适用于油气井压裂微地震监测、油藏动态监测等。公司还是美国HOTWELL公司的PNN（脉冲—中子）饱和度测井系统在中国的独家代理商，并可提供测井技术服务。天元公司在全国各大油田设有分公司或代表处，具有广泛的业务基础。

Booth NO.7

Elsiwave Technology Co. Ltd

北京珠玛阳光科技有限公司

Elsiwave Reservoir, a leading provider of ELASTIC Inversion PREDICTION software and services for reservoir and hydrocarbon prediction, reservoir characterization, time-lapse seismic reservoir monitoring, optimizing horizontal well drilling and geomechanics study for oil and gas industry.

珠玛阳光（Elsiwave Reservoir），领先的定量弹性（反演）预测软件和服务提供商，其定量弹性反演数据体广泛应用于储层和烃类预测、油藏描述、时延地震油藏动态监测、优化水平钻井和三维岩石力学建模。其最具竞争力的产品包括叠前保幅去噪软件ZdemulTM和抗噪的弹性反演软件SepiGeoTM等。

Booth NO.8 to NO.9

Compagnie Generale de Geophysique

法国地球物理公司

CGG is dedicated to efficient and sustainable development of natural resources all over the world. Our products and services span the breadth of geosciences, from frontier exploration to mature field revitalization. CGG acquires, processes, analyzes and manages all forms of geological and geophysical data including seismic, gravity, magnetic and satellite.

CGG provides a unique range of technologies, services and equipment designed to deliver geoscience solutions right across the Exploration & Production life cycle. From innovative tools and datasets to help New Ventures teams select the most prospective acreage to integrated geoscience workflows and products which help drilling engineers plan, steer and complete shale development wells, CGG has solutions for your most difficult challenges.

CGG原名Compagnie Generale de Geophysique（法国地球物理总公司），现在中国注册名为：赛吉纪技术服务（北京）有限公司。CGG作为一流的综合性地球科学技术服务公司，以其领先的技术在地质、地球物理及油藏评价等方面服务于全球油气公司。

CGG成立于1931年，在全球70多个国家和地区设有服务中心或代表机构，在纽约和巴黎上市。公司的业务活动遍布世界各地，其活动范围涉及地球物理勘探陆上和海上的资料采集、处理、解释，物探装备的制造及地震地质综合油藏研究。CGG集团的三大业务部：设备部、采集部及地学研究部（地质、地球物理和油藏），三大部门相互补充，在自然资源的勘探开发各方面为全球客户提供技术支持及软件销售服务，从而创造更大的价值。



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