# Second Sino-German Bilateral Symposium on Electromagnetic Geophysics

# 第二届中德电磁地球物理学双边研讨会

October 22 - 27, 2017, *Qingdao Meteorological Holiday Resort*

2017.10.22-27, 青岛市崂山区东海东路87号, 青岛气象度假村


The Sino-German Symposium on Electromagnetic Geophysics (SGEM) was initialized by Prof. Dr. Yuguo Li of Ocean University of China and Prof. Dr. Klaus Spitzer of Technical University of Freiberg, Germany, which is sponsored by the Sino-German Center for Research Promotion(SGC).

The 1st SGEM symposium was held from August 30th to September 3rd 2013 in Qingdao, China. Around 40 well-known scientists in the field of Electromagnetic Geophysics from China and Germany, also from Czech Republic and United Kingdom, plus 50 young researchers/graduate students, attended the symposium.

The 2nd SGEM symposium will be held from October 22 to 27, 2017 in Qingdao,China. This event picks up from the very successful 1st symposium. To further broaden the international interest in the EM field, we welcome participants over the world to attend this symposium.

## Program and Schedule (Oral Session)

### Monday, 23 October 2017 星期一, 2017年10月23日

| | | | |
|---|---|---|---|
| 9:00-9:40 | Welcome and opening address | | Session chair Prof. Dr. Yuguo Li |
| 9:40-10:05 | **Klaus Spitzer**: | A 3D sequential Inversion approach for electric and electromagnetic methods | Session chair Prof. Xiangru Kong |
| 10:05-10:30 | **Guoze Zhao**: | Detecting the earthquake anomaly using electromagnetic methods | |
| 10:45-11:10 | **Andreas Junge**: | Anisotropy in MT - challenging 3D isotropic inversion | Session chair Prof. Dr. Klaus Spitzer |
| 11:10-11:35 | **Wenbao Hu**: | Algorithm and implementation of 3D TDEM inversion | |
| 11:35-12:00 | **Xuben Wang**: | Research on the deep resistivity structure and dynamics of eastern Qinghai-Tibet Plateau of China | |
| 14:00-14:25 | **Zhijun Du**: | Improved resolution hydrocarbon mapping using Towed Streamer EM | Session chair Prof. Dr. Guoze Zhao |
| 14:25-14:50 | **Zhan Liu**: | Joint inversion of various geophysical data and its application in oil and gas exploration | |
| 14:50-15:15 | **Jinsong Shen**: | Study on the joint inversion of marine CSEM and seismic data constrained by well logs | |
| 15:15-15:40 | **Jianxin Liu**: | Seismic-guided regularized marine CSEM inversion | |
| 16:10-16:35 | **Ute Weckmann**: | Model creation and usage of constraints for 3D inversion of MT data with sparse and irregular station coverage | Session chair Prof. Dr. Andreas Junge |
| 16:35-17:00 | **Sheng Jin**: | A comparative study of the lithospheric electrical structure of the Circum-Tibatan Plateau orogenic belt. | |
| 17:00-17:25 | **Xiangyun Hu**: | The lithospheric structure of Southeast China, inferred from magnetotelluric data | |
| 17:25-17:50 | **Xin Wu**: | New progress in research and development of Helicopter-borne transient electromagnetic system in China | |

### Tuesday, 24 October 2017 星期二, 2017年10月24日

| | | | |
|---|---|---|---|
| 8:30-8:55 | **Jin Chen**: | The magmatic source of the Tristan da Cunha hotspot: implication from electrical conductivity | Session chair Prof. Dr. Xuben Wang |
| 8:55-9:20 | **Qinghua Huang**: | Numerical simulations of co-seismic electromagnetic signals | |
| 9:20-9:45 | **Liangjun Yan**: | The trial of CSTEM monitoring of shale fracturing | |
| 9:45-10:10 | **Jianxin Pei**: | Fast marine CSEM inversion in the CMP domain | |
| 10:40-11:05 | **Xiaoping Wu**: | Parallel Monte Carlo method for advanced detection in tunnel incorporating anisotropic resistivity effect | Session chair Dr. Jin Chen |
| 11:05-11:30 | **Shucai Liu**: | Study on the ground-tunnel transient electromagnetic method | |
| 11:30-11:55 | **Guoqiang Xue**: | Technology and application of near source TEM | |
| 14:00-14:25 | **Linjiang Qin**: | The influence of the gridding on MT responses of the 2D media with anisotropic conductivity structures | Session chair Dr. Zhijun Du |
| 14:25-14:50 | **Zhengyong Ren**: | Goal-oriend adpative finite element solver for global electromagnetic induction | |
| 14:50-15:15 | **Jana Boerner**: | Complex electrical conductivity of rocks with a reactive rock matrix | |
| 15:15-15:40 | **Bo Han**: | The impact of 3D conductivity anisotropy on magnetotelluric responses | |
| 16:00-16:30 | Poster Introduction 展板介绍 | | Dr. Ute Weckmann |
| 16:30-17:15 | Poster Presentation 展板展示 | | |

### Thursday, 26 October 2017 星期四, 2017年10月26日

| | | | |
|---|---|---|---|
| 8:30-8:55 | **Heinrich Brasse**: | 3-D update of former Andean resistivity models and the inclusion of transient electromagnetics | Session chair Prof. Dr. Jingtian Tang |
| 8:55-9:20 | **Qibin Xiao**: | Lateral rheology differences in lithosphere and dynamics revealed by magnetotelluric imaging at the northern Tibetan Plateau | |
| 9:20-9:45 | **Xiaobin Chen**: | Electrical structure of Ordos Block Lithosphere and its dynamic implication | |
| 9:45-10:10 | **Juzhi Deng**: | 3D EM inversion and the application to site screening of clays in northwest China as the host rocks for HLW disposal repository | |
| 10:40-11:05 | **Bülent Tezkan**: | Interpretation of Controlled Source Radiomagnetolluric (CSRMT) data by multidimensional conductivity models | Session chair Dr. Henrich Brasse |
| 11:05-11:30 | **Denghai Bai**: | A possible Patten of crustal flow beneath the eastern Tibetan Plateau Progress of EHS3D project | |
| 11:30-11:55 | **Jingtian Tang**: | A space-time array magnetotelluric data processing method | |
| 14:00-14:25 | **Oliver Ritter**: | Modern concepts for controlled source EM on land | Session chair Prof. Dr. Denghai Bai |
| 14:25-14:50 | **Gaofeng Ye**: | Study of three dimentional lithospheric conductivity structure of Tibet and China Central Orogen - constrain of channel flow from 3D MT dataset | |
| 14:50-15:15 | **Changfu Yang**: | Numerical modeling of MT responses to the 2D Geoelectric model with anisotropic conductivity structures | |
| 15:15-15:40 | **Changchun Yin**: | 3D MT anisotropic modeling with topography based on adaptive finite element method | |
| 16:10-16:35 | **Pritam Yogeshwar**: | Analyzing two-dimensional effects in central loop transient electromagnetic sounding data using a semi-synthetic tipper approach | Session chair Prof. Dr. Bülent Tezkan |
| 16:35-17:00 | **Xueming Shi**: | Advance of nonlinear geophysics inversion methods | |
| 17:00-17:25 | **Yuguo Li**: | Advances on marine CSEM studies | |

Ocean University of China 中国海洋大学

中德科学中心 Chinesisch-Deutsches Zentrum für Wissenschaftsförderung

Technische Universitaet Bergakademie Freiberg 德国弗莱贝格工业大学