



# TECHNICAL PROGRAM

V4.0

**Event Date:** 4-6 July 2025

**Event Location:** Chengdu University of Technology

**Venue Address:** No. 1, East Third Rd., Erxianqiao, Chenghua Dist., Chengdu, China

## Hotel Recommendations:

- **Chengdu Chonghua Howard Johnson Life** (900m to the event venue, 10-15 min by walk)  
Add: No.268, Donghua 1st Road, Chonghua Dist., Chengdu  
TEL: +86-19828350721
- **Hilton Garden Inn Chengdu Chonghua** (900m to the event venue, about 10-15 min by walk)  
Add: No. 699, Shanbanqiao Road, Chonghua Dist., Chengdu  
TEL: +86-(028)- 87877777
- **Mercure Hotel Chengdu Dongjiao Memory** (900m to event venue, about 10-15 min by walk)  
Add: No. 158, East Road, Erxianqiao, Chonghua Dist., Chengdu  
TEL: +86-(028)-65269696

## BRIEF AGENDA

| Date                    | Time                       | Activity & Session                                                                                                                                                                                                                           | Location                                                                                                 |
|-------------------------|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| Friday<br>4 July 2025   | 09:00-18:00                | Onsite Registration                                                                                                                                                                                                                          | 1 <sup>st</sup> Floor, Lobby, 9 <sup>th</sup> Academic Building, Chengdu University of Technology (CDUT) |
|                         | 13:00-17:00                | Field Trip                                                                                                                                                                                                                                   | Chengdu Natural History Museum (CDUT Museum)                                                             |
|                         | 17:30-18:00                | Session Chair Meeting                                                                                                                                                                                                                        | TBD                                                                                                      |
|                         | 18:00-19:30                | <i>Dinner</i>                                                                                                                                                                                                                                | <i>2<sup>nd</sup> Floor of Furong Canteen</i>                                                            |
| Saturday<br>5 July 2025 | 07:00-17:00                | Onsite Registration                                                                                                                                                                                                                          | 1 <sup>st</sup> Floor, Lobby, 9 <sup>th</sup> Academic Building, CDUT                                    |
|                         | 08:00-08:20                | <b>Opening Ceremony</b>                                                                                                                                                                                                                      | Int'l Lecture Hall, 9 <sup>th</sup> Academic Building, CDUT                                              |
|                         | 08:20-10:05<br>10:45-12:00 | <b>Session 1: Keynote Presentations</b>                                                                                                                                                                                                      |                                                                                                          |
|                         | 10:05-10:20                | <i>Group Photo</i>                                                                                                                                                                                                                           | In front / outside of the Int'l Lecture Hall                                                             |
|                         | 10:20-10:45                | <b>Poster Session A &amp; Coffee Break</b>                                                                                                                                                                                                   | <i>2<sup>nd</sup> Floor of Furong Canteen</i>                                                            |
|                         | 12:00-13:30                | <i>Lunch</i>                                                                                                                                                                                                                                 |                                                                                                          |
|                         | 14:00-15:40<br>16:00-17:40 | <b>Session 2:</b><br>New Technologies and Methods in Shallow Seismic Exploration.                                                                                                                                                            | Int'l Lecture Hall, 9 <sup>th</sup> Academic Building, CDUT                                              |
|                         |                            | <b>Session 3:</b><br>(1) Airborne/Semi-Airborne Electromagnetic Techniques and Applications.<br>(2) Satellite/UAV based remote sensing monitoring for geological hazards.                                                                    | Smart Teaching Room - 9B206, 9 <sup>th</sup> Academic Building, CDUT                                     |
|                         | 15:40-16:00                | <b>Poster Session B &amp; Coffee Break</b>                                                                                                                                                                                                   |                                                                                                          |
| Sunday<br>6 July 2025   | 18:00-19:30                | <i>Dinner</i>                                                                                                                                                                                                                                | <i>2<sup>nd</sup> Floor of Furong Canteen</i>                                                            |
|                         | 08:30-10:10<br>10:30-11:50 | <b>Session 4:</b><br>(1) New Technologies and Methods in Shallow Seismic Exploration.<br>(2) Advanced technologies and methods for early warning, risk assessment and mitigation of cascading hazards.                                       | Int'l Lecture Hall, 9 <sup>th</sup> Academic Building, CDUT                                              |
|                         |                            | <b>Session 5:</b><br>(1) Technological innovation for active tectonics, Geomorphology and Geoenvironmental engineering.<br>(2) Applications for machine learning/AI to interpret complex datasets.                                           | Smart Teaching Room - 9B206, 9 <sup>th</sup> Academic Building, CDUT                                     |
|                         | 10:10-10:30                | <i>Coffee Break</i>                                                                                                                                                                                                                          |                                                                                                          |
|                         | 12:00-13:30                | <i>Lunch</i>                                                                                                                                                                                                                                 | <i>2<sup>nd</sup> Floor of Furong Canteen</i>                                                            |
|                         | 14:00-16:30                | <b>Session 6:</b><br>(1) Recent Advances in Near-Surface Geophysics for Monitoring Geological Hazards (e.g., Earthquakes, Landslides).<br>(2) Applications for machine learning/AI to interpret complex datasets.                            | Int'l Lecture Hall, 9 <sup>th</sup> Academic Building, CDUT                                              |
|                         | 14:00-16:30                | <b>Session 7:</b><br>(1) Technological innovation for active tectonics, Geomorphology and Geoenvironmental engineering.<br>(2) Recent Advances in Near-Surface Geophysics for Monitoring Geological Hazards (e.g., Earthquakes, Landslides). | Smart Teaching Room - 9B206, 9 <sup>th</sup> Academic Building, CDUT                                     |
|                         | 15:20-15:30                | <i>Break</i>                                                                                                                                                                                                                                 |                                                                                                          |
|                         | 16:30-17:00                | Workshop Conclusion, Awarding & Closing Ceremony                                                                                                                                                                                             | Int'l Lecture Hall, 9 <sup>th</sup> Academic Building, CDUT                                              |
|                         | 17:30-19:00                | <i>Dinner</i>                                                                                                                                                                                                                                | <i>2<sup>nd</sup> Floor of Furong Canteen</i>                                                            |

### Friday, 4 July 2025

| Time        | Activities            | Location                                                                                                 |
|-------------|-----------------------|----------------------------------------------------------------------------------------------------------|
| 09:00-18:00 | Onsite Registration   | 1 <sup>st</sup> Floor, Lobby, 9 <sup>th</sup> Academic Building, Chengdu University of Technology (CDUT) |
| 13:00-17:00 | Field Trip            | Chengdu Natural History Museum (CDUT Museum)                                                             |
| 17:30-18:00 | Session Chair Meeting | TBD                                                                                                      |
| 18:00-19:30 | Dinner                | 2 <sup>nd</sup> Floor of Furong Canteen                                                                  |

### AM, Saturday, 5 July 2025

Location: Int'l Lecture Hall, 9<sup>th</sup> Academic Building, CDUT

Session 1: Opening Ceremony/Keynote Presentations

Session Chair: Jianping Huang, [TBD](#)

| Time        | Presentation Title                                                                                                                                            | Speaker                                                                                                               |
|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| 08:00-08:05 | Opening Address by Prof. <b>Arthur Cheng</b> , SEG Past-President, Society of Exploration Geophysicists                                                       |                                                                                                                       |
| 08:05-08:10 | Opening Address by Prof. <b>Qiang Xu</b> , President, Chengdu University of Technology                                                                        |                                                                                                                       |
| 08:10-08:15 | Opening Address by Prof. <b>Xuri Huang</b> , SEG China Executive Director, Academic Dean, School of Geoscience and Technology, Southwest Petroleum University |                                                                                                                       |
| 08:15-08:20 | Opening Address by the workshop Technical Co-chair Representative                                                                                             |                                                                                                                       |
| 08:20-08:45 | <b>Keynote 1:</b> SEG in a changing World                                                                                                                     | <b>Arthur Cheng</b> , Society of Exploration Geophysicists                                                            |
| 08:45-09:15 | <b>Keynote 2:</b> Characteristics of near-surface seismic velocities - A Review                                                                               | <b>Öz Yilmaz</b> , GeoTomo LLC, Houston, USA                                                                          |
| 09:15-09:40 | <b>Keynote 3:</b> InSAR Reveals Geohazards Caused by Oil/Gas Extraction in West Texas                                                                         | <b>Zhong Lu</b> , China University of Mining and Technology                                                           |
| 09:40-10:05 | <b>Keynote 4:</b> Urban Seismology Transformed: Massive Seismic Sensors Installed in Cities of China                                                          | <b>Jie Zhang</b> , University of Science and Technology of China                                                      |
| 10:05-10:20 | <i>Group Photo</i>                                                                                                                                            |                                                                                                                       |
| 10:20-10:45 | <b>Poster Session A &amp; Coffee Break</b>                                                                                                                    |                                                                                                                       |
| 10:45-11:10 | <b>Keynote 5:</b> Geophysical Electromagnetic Exploration Technology and Systems—Applications of Diffusion and Wave Equations                                 | <b>Guangyou Fang</b> , Aerospace Information Research Institute, Chinese Academy of Sciences.                         |
| 11:10-11:35 | <b>Keynote 6:</b> Stationary phase analysis for scattered waves in ambient noise cross-correlation functions                                                  | <b>Yunyue Elita Li</b> , Purdue University                                                                            |
| 11:35-12:00 | <b>Keynote 7:</b> Recent Progress in Research of Landslide Seismology                                                                                         | <b>Risheng Chu</b> , Innovation Academy for Precision Measurement Science and Technology, Chinese Academy of Sciences |
| 12:00-13:30 | <i>Lunch</i>                                                                                                                                                  |                                                                                                                       |

**PM, Saturday, 5 July 2025**

Location: Int'l Lecture Hall, 9<sup>th</sup> Academic Building, CDUT

Session 2: New Technologies and Methods in Shallow Seismic Exploration

Session Chair: [TBD](#)

| Time        | Presentation Title                                                                                                                             | Speaker                                                                                                                                                                                                        |
|-------------|------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 14:00-14:20 | <b>Invited Speaker 1:</b> GPR Investigation of Karst in a Carbonate Coastal Area for Geo-hazard Risk Assessment-Case Study                     | <b>Hesham El-Kaliouby</b> , National Research Centre, Egypt.                                                                                                                                                   |
| 14:20-14:40 | <b>Invited Speaker 2:</b> TBD                                                                                                                  | <b>Xiangyun Hu</b> , China University of Geosciences (Wuhan).                                                                                                                                                  |
| 14:40-15:00 | Imaging Method of Surface Wave Velocity and Attenuation Coefficient                                                                            | <b>Yongjin Shen</b> , Well Logging Technology Research Institute, Well Logging Co., Ltd., CNPC.                                                                                                                |
| 15:00-15:20 | Performance Comparison of Microtremor Detection of Coal Mine Goaf with Seismic Node Array and DAS systems                                      | <b>Zhengguang Zhao</b> , North China Institute of Science and Technology.                                                                                                                                      |
| 15:20-15:40 | Shallow subsurface rail track imaging from train noise recorded at existing Distributed Acoustic Sensing (DAS) installations                   | <b>Michael Behm</b> , GEODATA ZT GmbH.                                                                                                                                                                         |
| 15:40-16:00 | <b>Poster Session B &amp; Coffee Break</b>                                                                                                     |                                                                                                                                                                                                                |
| 16:00-16:20 | Long Tail Theory of Seismic Wave Amplitude Spectrum                                                                                            | <b>Zishun Li</b> , Naswi Petroleum Technology (Chengdu) Co., Ltd.                                                                                                                                              |
| 16:20-16:40 | GRU-Unet for pre-stack three-parameter inversion                                                                                               | <b>Zilu Fu</b> , School of Geophysics, Chengdu University of Technology.                                                                                                                                       |
| 16:40-17:00 | High resolution seismic reservoir prediction of SN13 well in desert area of the Junggar Basin                                                  | <b>Haibo Mao</b> , Xinjiang Oilfield, PetroChina.                                                                                                                                                              |
| 17:00-17:20 | Distributed Acoustic Sensing Using Dark Fiber for Imaging the Expressway Underground Structures                                                | <b>Kai Lin</b> , School of Earth Sciences and Engineering, Nanjing University.                                                                                                                                 |
| 17:20-17:40 | Applications of integrated geophysical methods for the glacier and paleo-landslide investigations in the eastern margin of the Tibetan Plateau | <b>Dan Wang</b> , 1. The Innovation Studio of Engineering Geophysics (ISEG), Research & Development Center, BGP Inc., CNPC. 2. CDUT. 3. Missouri University of Science and Technology, Rolla, Missouri, U.S.A. |
| 17:40-18:00 | Surface Wave Dispersion Curve Inversion Using the Generalized Wave Equation                                                                    | <b>Chengfang Zhang</b> , College of Information Science and Technology, Beijing University of Chemical Technology.                                                                                             |
| 18:00-19:30 | <i>Dinner</i>                                                                                                                                  |                                                                                                                                                                                                                |



**PM, Saturday, 5 July 2025**

Location: Smart Teaching Room - 9B206, 9<sup>th</sup> Academic Building, CDUT  
 Session 3: (1) Airborne/Semi-Airborne Electromagnetic Techniques and Applications.  
 (2) Satellite/UAV based remote sensing monitoring for geological hazards.  
 Session Chair: [TBD](#)

| Time        | Presentation Title                                                                                                                            | Speaker                                                                                                                                                                                                                                                            |
|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 14:00-14:20 | <b>Invited Speaker 3:</b> A Heterogeneous Ensemble Learning Method Combining Spectral, Terrain, and Texture Features for Landslide Mapping    | <b>Yi He</b> , 1. Lanzhou Jiaotong University; 2. National-Local Joint Engineering Research Center of Technologies and Applications for National Geographic State Monitoring; 3. Gansu Provincial Engineering Laboratory for National Geographic State Monitoring. |
| 14:20-14:40 | <b>Invited Speaker 4:</b> On drone- based airborne and semi-airborne transient electromagnetic system and software                            | <b>Huaifeng Sun</b> , Shandong University.                                                                                                                                                                                                                         |
| 14:40-15:00 | Integrating Remote Sensing and Electrical Resistivity for Assessing Coastal Dynamics and Saltwater Intrusion Along the Eastern Coast of Ghana | <b>Cyril D. Boateng</b> , Kwame Nkrumah University of Science and Technology (KNUST).                                                                                                                                                                              |
| 15:00-15:20 | Drone Airborne Transient Electromagnetic System and Its Application in the Goafs of Coal                                                      | <b>Zhengyu Xu</b> , School of Electrical Engineering, Chongqing University.                                                                                                                                                                                        |
| 15:20-15:40 | Total-field rotational invariant for multi-transmitter VLF-EM mapping                                                                         | <b>Nikita Zorin</b> , Harbin Institute of Technology.                                                                                                                                                                                                              |
| 15:40-16:00 | <b>Poster Session B &amp; Coffee Break</b>                                                                                                    |                                                                                                                                                                                                                                                                    |
| 16:00-16:20 | Interpretable Deep Learning Paradigm for Airborne Transient Electromagnetic Inversion                                                         | <b>Shuang Wang</b> , Chengdu University of Technology.                                                                                                                                                                                                             |
| 16:20-16:40 | Leakage identification of earth-rock dams based on infrared thermal imaging                                                                   | <b>Po Li</b> , Nanjing Hydraulic Research Institute & Tianjin University.                                                                                                                                                                                          |
| 16:40-17:00 | Combining Feature Engineering and Random Forest to Improve the Aeromagnetic Anomaly Detection Performance                                     | <b>Pengfei Zhang</b> , College of Underwater Acoustic Engineering, Harbin Engineering University.                                                                                                                                                                  |
| 17:00-17:20 | UAV-based ground-penetrating radar for combined measurement of soil moisture and salinity                                                     | <b>Qinbo Cheng</b> , College of Hydrology and Water Resources, Hohai University.                                                                                                                                                                                   |
| 17:20-17:40 | Development of a UAV-based Airborne Transient Electromagnetic Instrument and Its Feasibility for Loess Slope Detection                        | <b>Zhaofa Zeng</b> , College of Geo-Exploration Science and Technology, Jilin University.                                                                                                                                                                          |
| 17:40-18:00 | A Micro-Topography Enhancement Method for DEMs: Advancing Geological Hazard Identification                                                    | <b>Qiulin He</b> , Chengdu University of Technology.                                                                                                                                                                                                               |
| 18:00-19:30 | <i>Dinner</i>                                                                                                                                 |                                                                                                                                                                                                                                                                    |

## AM, Sunday, 6 July 2025

Location: Int'l Lecture Hall, 9<sup>th</sup> Academic Building, CDUT

Session 4: (1) New Technologies and Methods in Shallow Seismic Exploration.

(2) Advanced technologies and methods for early warning, risk assessment and mitigation of cascading hazards.

Session Chair: [TBD](#)

| Time        | Presentation Title                                                                                                                                     | Speaker                                                                                                                                                                                                                                                                                                                                       |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 08:30-08:50 | <b>Invited Speaker 5:</b> Geo-disasters prediction in Chinese underground mines                                                                        | <b>Majid Khan</b> , School of Resources and Safety Engineering, University of Science and Technology Beijing.                                                                                                                                                                                                                                 |
| 08:50-09:10 | Application and Breakthrough of Time-Frequency Electromagnetic Technology in the Study of Gravel Layers in the Northern Xinjiang Exploration Area      | <b>Zhiwei Cui</b> , BGP INC., CNPC.                                                                                                                                                                                                                                                                                                           |
| 09:10-09:30 | Microseismic monitoring for roof deformation in mining and early warning for safety                                                                    | <b>Wen'guang Wang</b> , UU (Shaanxi) Energy Technology Co., LTD.                                                                                                                                                                                                                                                                              |
| 09:30-09:50 | Research on High-Precision Extraction Methods of Microtremor Surface Wave Dispersion Curves Considering Noise Source Distribution                      | <b>Hongxing Li</b> , East China University of Technology.                                                                                                                                                                                                                                                                                     |
| 09:50-10:10 | Seismic Modeling and Case Studies of Shallow Phased Array Sources                                                                                      | <b>Jun Xiao</b> , College of Geo-Exploration Science and Technology, Jilin University.                                                                                                                                                                                                                                                        |
| 10:10-10:30 | <i>Coffee Break</i>                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                               |
| 10:30-10:50 | Time-Lapse Electrical Resistivity Monitoring of Soil Landslides: A Case Study of the Landslide at K272 Section of the Expressway from Suichuan to Dayu | <b>Hui Chen</b> , 1. National Key Laboratory of Uranium Resource Exploration and Nuclear Remote Sensing. 2. State Key Laboratory of Nuclear Resources and Environment, East China University of Technology. 3. Engineering Research Center for Seismic Disaster Prevention and Engineering Geological Disaster Detection of Jiangxi Province. |
| 10:50-11:10 | High-resolution transient Rayleigh surface wave method based on different offset distances                                                             | <b>Dazhou Zhang</b> , School of Geosciences and Info-Physics, Central South University.                                                                                                                                                                                                                                                       |
| 11:10-11:30 | The Two-Dimensional Surface Wave Imaging under the Generalized Wave Equation                                                                           | <b>Wenlei Bai</b> , College of Information Science and Technology, Beijing University of Chemical Technology.                                                                                                                                                                                                                                 |
| 11:30-11:50 | Numerical simulation and risk assessment of high-level collapse fragmentation                                                                          | <b>Zaid Ur Rehman Zaid</b> , State Key Laboratory of Geohazard Prevention and Geo-environment Protection, Chengdu University of Technology.                                                                                                                                                                                                   |
| 12:00-13:30 | <i>Lunch</i>                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                               |

## AM, Sunday, 6 July 2025

Location: Smart Teaching Room - 9B206, 9<sup>th</sup> Academic Building, CDUT

Session 5: (1) Technological innovation for active tectonics, Geomorphology and Geoenvironmental engineering.

(2) Applications for machine learning/AI to interpret complex datasets.

Session Chair: [TBD](#)

| Time        | Presentation Title                                                                                                                           | Speaker                                                                                                                                                                                                                                                 |
|-------------|----------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 08:30-08:50 | GeopGPD: geophysical exploration generative pre-trained detection basing on reinforcement learning from human feedback                       | <b>Jinghe Li</b> , College of Earth Sciences, Guilin University of Technology.                                                                                                                                                                          |
| 08:50-09:10 | The application of magnetic prospecting in locating wellhead positions and determining burial depth                                          | <b>Dabing Yang</b> , BGP Inc., China National Petroleum Corporation.                                                                                                                                                                                    |
| 09:10-09:30 | Can different machine learning methods have consistent interpretations of DEM-based factors in shallow landslide susceptibility assessments? | <b>Chuanhao Pu</b> , State Key Laboratory of Geohazard Prevention and Geoenvironment Protection, Chengdu University of Technology.                                                                                                                      |
| 09:30-09:50 | Seismic-enhanced magnetotelluric inversion                                                                                                   | <b>Yan Wu</b> , School of Geosciences and Info-Physics, Central South University.                                                                                                                                                                       |
| 09:50-10:10 | Joint 3D electromagnetic and seismic shallow subsurface velocity modeling                                                                    | <b>Zuzhi Hu</b> , BGP Inc., China National Petroleum Corporation.                                                                                                                                                                                       |
| 10:10-10:30 | <i>Coffee Break</i>                                                                                                                          |                                                                                                                                                                                                                                                         |
| 10:30-10:50 | Pseudo-Random Coding Ultra-Deep Detection Radar and Its Applications                                                                         | <b>Shengbo Ye</b> , 1. Laboratory of Electromagnetic Radiation and Sensing Technology, Aerospace Information Research Institute, CAS.<br>2. School of Electronic, Electrical, and Communication Engineering, University of Chinese Academy of Sciences. |
| 10:50-11:10 | Seismic inversion based on GAN joined with geophysical constraints for near-surface geology                                                  | <b>Jianguo Yan</b> , The College of Geophysics, Chengdu University of Technology.                                                                                                                                                                       |
| 11:10-11:30 | Dual-parameter inversion of snowpack GPR data using machine learning                                                                         | <b>Zohaib Akbar Khan</b> , 1. Key Laboratory of Mountain Hazards and Earth Surface Process, Institute of Mountain Hazards and Environment, Chinese Academy of Sciences (CAS).<br>2. University of Chinese Academy of Sciences.                          |
| 11:30-11:50 | Three physical guidance strategies for acoustic impedance estimation                                                                         | <b>Yingtian Liu</b> , School of Geophysics, Chengdu University of Technology.                                                                                                                                                                           |
| 12:10-13:30 | <i>Lunch</i>                                                                                                                                 |                                                                                                                                                                                                                                                         |

**PM, Sunday, 6 July 2025**

Location: Int'l Lecture Hall, 9<sup>th</sup> Academic Building, CDUT

Session 6: (1) Recent Advances in Near-Surface Geophysics for Monitoring Geological Hazards (e.g., Earthquakes, Landslides).

(2) Applications for machine learning/AI to interpret complex datasets.

Session Chair: [TBD](#)

| Time        | Presentation Title                                                                                                                                                               | Speaker                                                                                                                                                                                                                                                                                   |
|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 14:00-14:20 | <b>Invited Speaker 6:</b> Health Monitoring of Dam Using Distributed Fiber Acoustic Sensing                                                                                      | <b>Feng Cheng</b> , Zhejiang University.                                                                                                                                                                                                                                                  |
| 14:20-14:40 | How earthquake influence shallow aquifer system? Lessons learned from the coseismic liquefaction-induced deformation following the 2019 Mirpur earthquake, Pakistan              | <b>Muhammad Younis Khan</b> , 1. Department of Earth Sciences College of Science, Sultan Qaboos University, Oman. 2. National Centre of Excellence in Geology, University of Peshawar, Pakistan.                                                                                          |
| 14:40-15:00 | Investigation of Overburden Failure in the Roof and Floor of the 14321 Working Face in Gubei Coal Mine                                                                           | <b>Zheng Yang</b> , School of Earth and Environment, Anhui University of Science and Technology.                                                                                                                                                                                          |
| 15:00-15:20 | A novel geophysical assessment of multiple geohazards along China-Pakistan Economic Corridor (CPEC)                                                                              | <b>Muhammad Hasan</b> , 1. State Key Laboratory of Mountain Hazards and Engineering Resilience, Institute of Mountain Hazards and Environment, CAS; 2. China-Pakistan Joint Research Center on Earth Sciences, CAS-HEC, Islamabad, Pakistan; 3 University of Chinese Academy of Sciences. |
| 15:20-15:30 | <i>Coffee Break</i>                                                                                                                                                              |                                                                                                                                                                                                                                                                                           |
| 15:30-15:50 | Research on the Structural Characteristics of Landslide Geological Disaster Bodies Based on Comprehensive Electrical Parameters-Taking the Xingyi Maling Landslide as an Example | <b>Qilin Huang</b> , 1. School of Geophysics, Chengdu University of Technology; 2. Geophysical and Geochemical Exploration Institute, Guizhou Provincial Geological Survey.                                                                                                               |
| 15:50-16:10 | A study on the identification of rocks in non-obvious landslides based on instance segmentation                                                                                  | <b>Cheng Huang</b> , School of Electrical Engineering, Chongqing University.                                                                                                                                                                                                              |
| 16:10-16:30 | A PSO-CNN-LSTM Model for Seismic Facies Analysis: Methodology and Applications                                                                                                   | <b>Luyao Liao</b> , College of Geophysics, Chengdu University of Technology.                                                                                                                                                                                                              |
| 16:30-17:00 | Workshop Conclusion, Awarding & Closing Ceremony                                                                                                                                 |                                                                                                                                                                                                                                                                                           |
| 17:30-19:00 | <i>Dinner</i>                                                                                                                                                                    |                                                                                                                                                                                                                                                                                           |



**PM, Sunday, 6 July 2025**

Location: Smart Teaching Room - 9B206, 9<sup>th</sup> Academic Building, CDUT

Session 7: (1) Technological innovation for active tectonics, Geomorphology and Geoenvironmental engineering.

(2) Recent Advances in Near-Surface Geophysics for Monitoring Geological Hazards (e.g., Earthquakes, Landslides)

Session Chair: [TBD](#)

| <b>Time</b>        | <b>Presentation Title</b>                                                                                                        | <b>Speaker</b>                                                                                                                    |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| 14:00-14:20        | Integrating Multi-Method Geophysical Prospection and UAV Data for Uncovering British Colonial History in Ghana                   | <b>Cyril D. Boateng</b> , Kwame Nkrumah University of Science and Technology (KNUST).                                             |
| 14:20-14:40        | Exploration of structural stability of coal overburden based on resistivity method                                               | <b>Chang Liu</b> , School of Earth and Environment, Anhui University of Science and Technology.                                   |
| 14:40-15:00        | Research on Monitoring Technology for Leakage Hazards in Embankments Based on Time Shift Resistance Method                       | <b>Bin Shen</b> , School of Geophysics and Measurement and Control Technology, East China University of Technology.               |
| 15:00-15:20        | Multi-Evaluation-driven Adaptive Gravity Focusing Inversion                                                                      | <b>Xin Lin</b> , College of Geophysics, Chengdu University of Technology.                                                         |
| 15:20-15:30        | <i>Coffee Break</i>                                                                                                              |                                                                                                                                   |
| 15:30-15:50        | Efficient 3D Airborne GPR Simulation and Migration Imaging for Landslide Investigation                                           | <b>Lifeng Mao</b> , Chengdu University of Technology.                                                                             |
| 15:50-16:10        | 3D Geological Modeling and Stability Assessment Based on the Semi-Airborne Electromagnetic Method                                | <b>Shiyao Jia</b> , State Key Laboratory of Geohazard Prevention and Geoenvironment Protection, Chengdu University of Technology. |
| 16:10-16:30        | Calculation of Natural Fractures Generated by Orogenesis with Continuum Damage Mechanics and Its Application in Shunbei Oilfield | <b>Xinpu Shen</b> , China University of Petroleum (Beijing).                                                                      |
| <u>16:30-17:00</u> | Workshop Conclusion, Awarding & Closing Ceremony<br>( <i>Int'l Lecture Hall, 9<sup>th</sup> Academic Building, CDUT</i> )        |                                                                                                                                   |
| 17:30-19:00        | <i>Dinner</i>                                                                                                                    |                                                                                                                                   |

## POSTER SESSION – A

**Saturday, 5 July 2025**

Subjects:

- (1) New Technologies and Methods in Shallow Seismic Exploration.
- (2) Recent Advances in Near-Surface Geophysics for Monitoring Geological Hazards (e.g., Earthquakes, Landslides).

Location: **TBD**

Time: 10:20-10:45

Session Chair: **TBD**

| Time        | e-Screen | Presentation Title                                                                                                                                      | Speaker                                                                                                                                        |
|-------------|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| 10:15-10:20 | 1#       | Application of surface waves in the investigation of near surface for oil and gas exploration                                                           | <b>Jun Wu</b> , BGP Inc., CNPC.                                                                                                                |
| 10:20-10:25 | 1#       | Construction and Formation Mechanism Analysis of the Tianziling Landslide Geological Disaster Monitoring Site in Jiu'an Area, Lianzhou, Guangdong       | <b>Ziwen Zhang</b> , 1. Guangdong University of Technology. 2. Guangzhou Maritime University.                                                  |
| 10:25-10:30 | 1#       | Seismic Data Reconstruction Method of Coal Mining Area Based on Curvelet Transform                                                                      | <b>Tun Yang</b> , CCTEG Xi'an Research Institute (Group) Co., Ltd.                                                                             |
| 10:30-10:35 | 1#       | Imaging of deep density structure of Sichuan Basin and Analysis for seismogenic background of the Ms6.0 Sichuan Luxian earthquake on September 16, 2021 | <b>Mujing Lan</b> , Key Laboratory of Earth Exploration and Information Technology of Ministry of Education, Chengdu University of Technology. |
| 10:35-10:40 | 1#       | Calculation of Natural Fractures Generated by Orogenesis with Continuum Damage Mechanics and Its Application in Shunbei Oilfield                        | <b>Xinpu Shen</b> , China University of Petroleum (Beijing).                                                                                   |
| 10:15-10:20 | 2#       | Application of tomographic inversion method constrained by uphole velocity in complex mountainous areas                                                 | <b>Fuhong Zhang</b> , BGP Inc., CNPC.                                                                                                          |
| 10:20-10:25 | 2#       | Discrimination of underground metal and non-metal pipelines in seasonal freezing soil area                                                              | <b>Tianyu Liao</b> , Key Laboratory of Signal Detection and Processing, College of Information Science and Engineering, Xinjiang University.   |
| 10:25-10:30 | 2#       | Application of Transient Electromagnetic Method in Near Surface Velocity Investigation in Loess Plateau Area                                            | <b>Yunjian Yang</b> , BGP Inc., CNPC.                                                                                                          |
| 10:30-10:35 | 2#       | Gravity deep structure and dynamics of Yishu fault zone revealed by land-sea gravity observation                                                        | <b>Qipei Pang</b> , China University of Geosciences (Wuhan).                                                                                   |
| 10:35-10:40 | 2#       | Design of Frequency-Domain Ground Penetrating Radar System Based on Microcontroller                                                                     | <b>Xiang Xin</b> , Chengdu University of Technology.                                                                                           |

## POSTER SESSION – B

**Saturday, 5 July 2025**

Subjects:

- (1) Satellite/UAV based remote sensing monitoring for geological hazards.
- (2) Advanced technologies and methods for early warning, risk assessment and mitigation of cascading hazards.
- (3) Technological innovation for active tectonics, Geomorphology and Geoenvironmental engineering.
- (4) Applications for machine learning/AI to interpret complex datasets.

Location: [TBD](#)

Time: 15:40-16:00

Session Chair: [TBD](#)

| Time        | e-Screen | Presentation Title                                                                                                               | Speaker                                                                                                                                                                                                                                                                |
|-------------|----------|----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 15:40-15:45 | 1#       | A landslide susceptibility assessment method considering the similarity of geographic environments based on graph neural network | <b>Qing Zhang</b> , 1. Lanzhou Jiaotong University; 2. National-Local Joint Engineering Research Center of Technologies and Applications for National Geographic State Monitoring; 3. Gansu Provincial Engineering Laboratory for National Geographic State Monitoring |
| 15:45-15:50 | 1#       | Random Forest-Based Integration of TSP and TEM for Water Inrush Prediction in Tunnels                                            | <b>Junyi Liao</b> , Chengdu University of Technology.                                                                                                                                                                                                                  |
| 15:50-15:55 | 1#       | Research on intelligent monitoring technique of microseismic monitoring                                                          | <b>Bo Liu</b> , 1.BGP Inc., CNPC. 2. Optical Science and Technology (Chengdu) Ltd, Chengdu.                                                                                                                                                                            |
| 15:55-16:00 | 1#       | 3D Magnetic Architecture and Basement Configuration of the Sichuan Basin                                                         | <b>Jiayue Deng</b> , Key Laboratory of Earth Exploration and Information Technology of Ministry of Education and college of geophysics, Chengdu University of Technology.                                                                                              |
| 15:40-15:45 | 2#       | Near-Surface Geophysics and Machine Learning for Aquifer Vulnerability Assessment                                                | <b>Umair Khan</b> , University of Chinese Academy of Sciences.                                                                                                                                                                                                         |
| 15:45-15:50 | 2#       | Determination of Mechanical Parameters for Soil-Rock Mixtures Based on Representative Elementary Units                           | <b>Chunlin Ma</b> , School of Geoscience and                                                                                                                                                                                                                           |

|             |    |                                                                            |                                                                                                                                                     |
|-------------|----|----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
|             |    |                                                                            | Technology, Southwest Petroleum University.                                                                                                         |
| 15:50-15:55 | 2# | Application of deep learning-based velocity modeling in aquifer prediction | <b>Zhijun Ma</b> , State Key Laboratory of Deep Earth Exploration and Imaging, College of Geo-exploration Science and Technology, Jilin University. |
| 15:55-16:00 | 2# | Analysis of topographic correction with half length of square              | <b>Xiaona Li</b> , School of Engineering and Materials, Tianfu College, Southwestern University of Finance and Economics.                           |



WORKSHOP

## ***Near-surface Geophysical Exploration and Geo-Disaster Prevention Technology***

4–6 July '25 • Chengdu, China

### TECHNICAL PROGRAM

# 技术交流日程

V4.0

会议时间：2025 年 7 月 4-6 日

会议地点：成都理工大学 九教- 国际学术报告厅、智慧教室 9B206

参会地址：中国四川省成都市成华区二仙桥东三路 1 号

会场附近酒店推荐：

- **成都成华豪生 Life 酒店**

地址：成都市成华区东华一路 268 号（距离会场约 900 米，步行 10-15 分钟）

电话：+86-19828350721

- **成都成华希尔顿花园酒店**

地址：四川成都成华区成华大道杉板桥路 699 号（距离会场约 900 米，步行 10-15 分钟）

电话：+86-(028)- 87877777, +86-19938133723

- **成都东郊记忆美居酒店**

地址：四川成都成华区二仙桥东路 158 号（距离会场约 900 米，步行 10-15 分钟）

电话：+86-(028)-65269696



简明日程

| 日期          | 时间                         | 议程与活动                                                                       | 地点                   |
|-------------|----------------------------|-----------------------------------------------------------------------------|----------------------|
| 星期五<br>7月4日 | 09:00-18:00                | 现场注册                                                                        | 成都理工大学 九教一层大厅        |
|             | 13:00-17:00                | 实地考察                                                                        | 成都自然博物馆（成都理工大学博物馆）   |
|             | 17:30-18:00                | 分会场主席会议                                                                     | TBD                  |
|             | 18:00-19:30                | 晚餐                                                                          | 芙蓉餐厅二层               |
| 星期六<br>7月5日 | 07:00-17:00                | 现场注册                                                                        | 成都理工大学 九教一层大厅        |
|             | 08:00-08:20                | 开幕式                                                                         | 成都理工大学<br>九教-国际学术报告厅 |
|             | 08:20-10:05<br>10:45-12:00 | 单元一：主旨报告                                                                    |                      |
|             | 10:05-10:20                | 会议合影                                                                        | 九教前广场                |
|             | 10:20-10:45                | 张贴报告单元 A，茶歇                                                                 | 国际学术报告厅 外大堂          |
|             | 12:00-13:30                | 午餐                                                                          | 芙蓉餐厅二层               |
|             | 14:00-15:40<br>16:00-17:40 | 单元二：<br>浅层地震勘探新技术与新方法.                                                      | 九教-国际学术报告厅           |
|             |                            | 单元三：<br>(1) 航空 / 半航空电磁技术及应用.<br>(2) 基于卫星 / 无人机的地质灾害遥感监测.                    | 九教-智慧教室 9B206        |
|             | 15:40-16:00                | 张贴报告单元 B，茶歇                                                                 | 国际学术报告厅 外大堂          |
|             | 18:00-19:30                | 晚餐                                                                          | 芙蓉餐厅二层               |
| 星期日<br>7月6日 | 08:30-10:10<br>10:30-11:50 | 单元四：<br>(1) 浅层地震勘探新技术与新方法.<br>(2) 用于预警、风险评估和缓解级联影响的先进技术和方法.                 | 九教-国际学术报告厅           |
|             |                            | 单元五：<br>(1) 活动构造、地貌学及地质环境工程方面的技术创新.<br>(2) 机器学习 / 人工智能在解读复杂数据集方面的应用.        | 九教-智慧教室 9B206        |
|             | 10:10-10:30                | 茶歇                                                                          | 国际学术报告厅 外大堂          |
|             | 12:00-13:30                | 午餐                                                                          | 芙蓉餐厅二层               |
|             | 14:00-16:30                | 单元六：<br>(1) 用于地质灾害监测（如地震、滑坡）的近地表地球物理学最新进展.<br>(2) 机器学习 / 人工智能在解读复杂数据集方面的应用. | 九教-国际学术报告厅           |
|             | 14:00-16:30                | 单元七：<br>(1) 活动构造、地貌学及地质环境工程方面的技术创新.<br>(2) 用于地质灾害监测（如地震、滑坡）的近地表地球物理学最新进展.   | 九教-智慧教室 9B206        |
|             | 15:20-15:30                | 茶歇                                                                          |                      |
|             | 16:30-17:00                | 会议总结<br>颁奖典礼暨闭幕式                                                            | 九教-国际学术报告厅           |
|             | 17:30-19:00                | 晚餐                                                                          | 芙蓉餐厅二层               |
|             |                            |                                                                             |                      |

| 2025 年 7 月 4 日，星期五 |         |                    |
|--------------------|---------|--------------------|
| 时间                 | 活动安排    | 地点                 |
| 09:00-18:00        | 现场注册    | 成都理工大学 九教一层大厅      |
| 13:00-17:00        | 实地考察    | 成都自然博物馆（成都理工大学博物馆） |
| 17:30-18:00        | 分会场主席会议 | TBD                |
| 18:00-19:30        | 晚餐      | 芙蓉餐厅二层             |

| 2025 年 7 月 5 日，星期六（上午）                               |                                             |                                             |
|------------------------------------------------------|---------------------------------------------|---------------------------------------------|
| 地点：成都理工大学，九教-国际学术报告厅<br>单元一：开幕式，主旨报告<br>单元主席：黄建平，TBD |                                             |                                             |
| 时间                                                   | 议程与报告题目                                     | 报告人                                         |
| 08:00-08:05                                          | 开幕致辞，郑传汉 教授，SEG 国际勘探地球物理学家学会 前任主席           |                                             |
| 08:05-08:10                                          | 开幕致辞，许强 教授，成都理工大学 校长                        |                                             |
| 08:10-08:15                                          | 开幕致辞，黄旭日 教授，SEG 中国 执行理事，西南石油大学地球科学与技术学院 院长  |                                             |
| 08:15-08:20                                          | 开幕致辞，会议技术主席代表                               |                                             |
| 08:20-08:45                                          | <b>主旨报告 1：</b> 变局世界中的 SEG 国际勘探地球物理学家学会      | 郑传汉 教授，SEG 前任主席，SEG 国际勘探地球物理学家学会            |
| 08:45-09:15                                          | <b>主旨报告 2：</b> 近地表地震速度特征综述                  | Öz Yilmaz 院士，GeoTomo LLC，休斯敦，美国             |
| 09:15-09:40                                          | <b>主旨报告 3：</b> InSAR 揭示德克萨斯西部油气开采活动导致地质灾害   | 路中 教授，中国矿业大学                                |
| 09:40-10:05                                          | <b>主旨报告 4：</b> 城市地震学变革：安装在中国城市的大规模地震传感器     | 张捷 院士，中国科学技术大学                              |
| 10:05-10:20                                          | 会议合影                                        |                                             |
| 10:20-10:45                                          | 张贴报告单元 A，茶歇                                 |                                             |
| 10:45-11:10                                          | <b>主旨报告 5：</b> 地球物理电磁探测技术与系统—扩散方程与波动方程的技术应用 | 方广有 教授，中国科学院空天信息创新研究院，中国科学院空天信息研究院粤港澳大湾区研究院 |
| 11:10-11:35                                          | <b>主旨报告 6：</b> 地震背景噪声互相关函数中非直达波的稳相分析        | 李云月 Elita 教授，普渡大学                           |
| 11:35-12:00                                          | <b>主旨报告 7：</b> 滑坡地震学研究进展                    | 储日升 教授，中国科学院精密测量科学与技术创新研究院                  |
| 12:00-13:30                                          | 午餐                                          |                                             |

| 2025 年 7 月 5 日，星期六（下午）                                 |                                                |                                                                                                                                       |
|--------------------------------------------------------|------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| 地点：成都理工大学，九教-国际学术报告厅<br>单元二：浅层地震勘探新技术与新方法。<br>单元主席：TBD |                                                |                                                                                                                                       |
| 时间                                                     | 报告题目                                           | 报告人                                                                                                                                   |
| 14:00-14:20                                            | <b>特邀报告 1:</b> 碳酸盐岩海岸带岩溶地质灾害风险评估<br>地质雷达调查案例研究 | <b>Hesham El-Kaliouby 教授</b> ,<br>埃及国家研究中心                                                                                            |
| 14:20-14:40                                            | <b>特邀报告 2:</b> TBD                             | <b>胡祥云 教授</b> , 中国地质大学<br>(武汉)                                                                                                        |
| 14:40-15:00                                            | 面波速度和衰减系数成像方法                                  | <b>沈永进</b> , 中国石油集团测井<br>有限公司测井技术研究院                                                                                                  |
| 15:00-15:20                                            | 浅埋煤层采空区节点地震仪及 DAS 微动探测应用效果<br>对比               | <b>赵争光</b> , 华北科技学院 - 应<br>急管理大学                                                                                                      |
| 15:20-15:40                                            | 基于现有分布式声学传感 (DAS) 装置记录的列车噪<br>声进行浅层地下铁路轨道成像    | <b>Michael Behm</b> , GEODATA<br>ZT GmbH.                                                                                             |
| 15:40-16:00                                            | <b>张贴报告单元 B</b> , 茶歇                           |                                                                                                                                       |
| 16:00-16:20                                            | 地震波振幅谱长尾理论                                     | <b>李子顺</b> , 纳斯维石油科技<br>(成都) 有限公司                                                                                                     |
| 16:20-16:40                                            | 用于叠前三参数反演的 GRU-Unet                            | <b>付子禄</b> , 成都理工大学地球<br>物理学院                                                                                                         |
| 16:40-17:00                                            | 准噶尔盆地沙漠区 SN13 井高分辨率地震储层预测                      | <b>毛海波</b> , 中国石油天然气集<br>团公司新疆油田分公司勘探<br>开发研究院地球物理研究所                                                                                 |
| 17:00-17:20                                            | 利用暗光纤和分布式光纤声波传感对高速公路地下结<br>构成像                 | <b>林锴</b> , 南京大学地球科学与<br>工程学院                                                                                                         |
| 17:20-17:40                                            | 基于多物理场思路的青藏高原东缘冰川及古滑坡体的<br>综合工程物探方法实践与探索       | <b>王丹</b> , 1. 中国石油集团东方<br>地球物理勘探有限责任公司<br>物探技术研究中心工程物探<br>创新工作室; 2. 成都理工大<br>学地质灾害防治与地质环境<br>保护全国重点实验室; 3. 美<br>国密苏里科技大学地质与地<br>球物理系 |
| 17:40-18:00                                            | 广义波动方程下的面波频散曲线反演                               | <b>张成方</b> , 北京化工大学信息<br>科学与技术学院                                                                                                      |
| 18:00-19:30                                            | 晚餐                                             |                                                                                                                                       |

2025 年 7 月 5 日，星期六（下午）

地点：成都理工大学，九教-智慧教室 9B206  
 单元三：（1）航空 / 半航空电磁技术及应用。  
 （2）基于卫星 / 无人机的地质灾害遥感监测。  
 单元主席：TBD

| 时间          | 报告题目                                       | 报告人                                                                          |
|-------------|--------------------------------------------|------------------------------------------------------------------------------|
| 14:00-14:20 | <b>特邀报告 3:</b> 一种结合光谱、地形和纹理特征的异构集成学习滑坡制图方法 | <b>何毅</b> , 1. 兰州交通大学测绘与地理信息学院; 2. 地理国情监测技术应用国家地方联合工程研究中心; 3. 甘肃省地理国情监测工程实验室 |
| 14:20-14:40 | <b>特邀报告 4:</b> 无人机全航空和半航空瞬变电磁系统与软件开发实践     | <b>孙怀凤</b> , 山东大学                                                            |
| 14:40-15:00 | 综合运用遥感和电阻率法评估加纳东海岸的海岸动态和海水入侵情况             | <b>Cyril D. Boateng</b> , 加纳恩克鲁玛科技大学 (KNUST)                                 |
| 15:00-15:20 | 无人机航空瞬变电磁系统及其在采空区中的应用                      | <b>徐正玉</b> , 重庆大学 电气工程学院                                                     |
| 15:20-15:40 | 多发射机甚低频电磁映射的全场旋转不变性                        | <b>Nikita Zorin</b> , 哈尔滨工业大学                                                |
| 15:40-16:00 | <b>张贴报告单元 B</b> , 茶歇                       |                                                                              |
| 16:00-16:20 | 用于航空电磁反演的可解释性深度学习范式                        | <b>王爽</b> , 成都理工大学                                                           |
| 16:20-16:40 | 基于红外热成像的土石堤坝渗漏识别                           | <b>李坡</b> , 1. 南京水利科学研究院; 2. 天津大学                                            |
| 16:40-17:00 | 基于特征工程与随机森林提高航磁异常检测性能的方法研究                 | <b>张鹏飞</b> , 哈尔滨工程大学水声工程学院                                                   |
| 17:00-17:20 | 监测表层土壤水分盐分含量的无人机载地质雷达技术                    | <b>程勤波</b> , 河海大学水文水资源学院                                                     |
| 17:20-17:40 | 无人机航空瞬变电磁仪装备研发及黄土边坡探测可行性研究                 | <b>曾昭发</b> , 吉林大学地球探测科学与技术学院                                                 |
| 17:40-18:00 | 数字高程模型微地形增强方法: 提升地质灾害识别能力                  | <b>何秋霖</b> , 成都理工大学                                                          |
| 18:00-19:30 | <i>Dinner</i>                              |                                                                              |

| 2025 年 7 月 6 日，星期日（上午）                                                                    |                                  |                                                                               |
|-------------------------------------------------------------------------------------------|----------------------------------|-------------------------------------------------------------------------------|
| 地点：成都理工大学，九教-国际学术报告厅<br>单元四：（1）浅层地震勘探新技术与新方法.<br>（2）用于预警、风险评估和缓解级联影响的先进技术和方法.<br>单元主席：TBD |                                  |                                                                               |
| 时间                                                                                        | 报告题目                             | 报告人                                                                           |
| 08:30-08:50                                                                               | <b>特邀报告 5：</b> 中国地下矿山地质灾害预测      | <b>Majid Khan</b> ，北京科技大学资源与安全工程学院                                            |
| 08:50-09:10                                                                               | 时频电磁技术在北疆探区砾石层研究中的应用与突破          | <b>崔志伟</b> ，中国石油集团东方地球物理勘探有限责任公司                                              |
| 09:10-09:30                                                                               | 矿山采掘中顶板变形的微震监测与安全预警              | <b>王文光</b> ，油优（陕西）能源科技有限公司                                                    |
| 09:30-09:50                                                                               | 基于噪声源分布的微动面波色散曲线高精度提取方法研究        | <b>李红星</b> ，东华理工大学                                                            |
| 09:50-10:10                                                                               | 浅层相控阵源地震模拟与实例                    | <b>肖珺</b> ，吉林大学地球探测科学与技术学院                                                    |
| 10:10-10:30                                                                               | 茶歇                               |                                                                               |
| 10:30-10:50                                                                               | 土质滑坡的时移电阻率监测实验—以遂大高速公路K272 段滑坡为例 | <b>陈辉</b> ，1. 铀资源勘查与核遥感国家重点实验室；2. 东华理工大学核资源与环境国家重点实验室；3. 江西省防震减灾与地质灾害探测工程研究中心 |
| 10:50-11:10                                                                               | 基于不同偏移距的高分辨率瞬态瑞利面波方法             | <b>张大洲</b> ，中南大学地球科学与信息物理学院                                                   |
| 11:10-11:30                                                                               | 广义波动方程下的二维结构面波成像                 | <b>白文磊</b> ，北京化工大学信息科学与技术学院                                                   |
| 11:30-11:50                                                                               | 高层坍塌碎片化的数值模拟与风险评估                | <b>Zaid Ur Rehman Zaid</b> ，成都理工大学地质灾害防治与地质环境保护全国重点实验室                        |
| 12:00-13:30                                                                               | 午餐                               |                                                                               |



2025 年 7 月 6 日，星期日（上午）

地点：成都理工大学，九教-智慧教室 9B206

单元五：（1）活动构造、地貌学及地质环境工程方面的技术创新.

（2）机器学习 / 人工智能在解读复杂数据集方面的应用.

单元主席：TBD

| 时间          | 报告题目                                 | 报告人                                                         |
|-------------|--------------------------------------|-------------------------------------------------------------|
| 08:30-08:50 | GeopGPD：基于人类反馈强化学习的地球物理勘探生成式预训练检测技术  | 李静和，桂林理工大学地球科学学院                                            |
| 08:50-09:10 | 磁力勘探在寻找井口位置及埋深中的应用                   | 杨大兵，中国石油集团东方地球物理勘探有限责任公司                                    |
| 09:10-09:30 | 不同的机器学习对浅层滑坡易发性评价是否具有一致性的解释？         | 蒲川豪，成都理工大学地质灾害防治与地质环境保护全国重点实验室                              |
| 09:30-09:50 | 地震增强的大地电磁反演                          | 吴岩，中南大学地球科学与信息物理学院                                          |
| 09:50-10:10 | 三维电磁与地震联合浅地表速度建模                     | 胡祖志，中国石油集团东方地球物理勘探有限责任公司                                    |
| 10:10-10:30 | 茶歇                                   |                                                             |
| 10:30-10:50 | 伪随机编码超深探测雷达及其应用                      | 叶盛波，1. 中国科学院空天信息创新研究院电磁辐射与探测技术重点实验室；<br>2. 中国科学院大学电子电气与工程学院 |
| 10:50-11:10 | 基于 GAN 网络和地球物理约束的地震反演及在解决近地表地质问题中的应用 | 阎建国，成都理工大学地球物理学院                                            |
| 11:10-11:30 | 利用机器学习对积雪 GPR 数据进行双参数反演              | Zohaib Akbar Khan, 1. 中国科学院、水利部成都山地灾害与环境研究所；2. 中国科学院大学      |
| 11:30-11:50 | 声阻抗估计的三种物理引导策略                       | 刘应天，成都理工大学地球物理学院                                            |
| 12:00-13:30 | 午餐                                   |                                                             |

2025 年 7 月 6 日，星期日（下午）

地点：成都理工大学，九教-国际学术报告厅

单元六：(1) 用于地质灾害监测（如地震、滑坡）的近地表地球物理学最新进展.

(2) 利用永久性电阻率装置对灾害进行短期、中期及长期监测.

(3) 机器学习 / 人工智能在解读复杂数据集方面的应用.

单元主席：TBD

| 时间          | 报告题目                                            | 报告人                                                                            |
|-------------|-------------------------------------------------|--------------------------------------------------------------------------------|
| 14:00-14:20 | <b>特邀报告 6:</b> 分布式光纤地震传感堤坝监测                    | 程逢，浙江大学                                                                        |
| 14:20-14:40 | 地震如何影响浅层含水层系统？——来自 2019 年巴基斯坦米尔普尔地震引发的共震液化变形的启示 | <b>Muhammad Younis Khan</b> , 1. 阿曼卡布斯苏丹大学科学院地球科学学系；2. 巴基斯坦白沙瓦大学国家地质科学卓越中心     |
| 14:40-15:00 | 顾北煤矿 14321 工作面顶底板覆岩破坏探查                         | <b>杨正</b> ，安徽理工大学地球与环境学院                                                       |
| 15:00-15:20 | 中巴经济走廊沿线多种地质灾害的地球物理新评估                          | <b>Muhammad Hasan</b> , 1. 中国科学院、水利部成都山地灾害与环境研究所；2. 中国-巴基斯坦地球科学研究中心；3. 中国科学院大学 |
| 15:20-15:30 | 茶歇                                              |                                                                                |
| 15:30-15:50 | 基于综合电参数的滑坡地质灾害体结构特征精细识别技术研究-以兴义马岭滑坡为例           | <b>黄启霖</b> ，1. 成都理工大学地球物理学院；2. 贵州省地矿局地球物理地球化学勘查院                               |
| 15:50-16:10 | 基于实例分割的非明显滑坡区岩石识别研究                             | <b>黄程</b> ，重庆大学电气工程学院                                                          |
| 16:10-16:30 | 地震相分析的 PSO-CNN-LSTM 模型：方法和应用                    | <b>廖璐瑶</b> ，成都理工大学地球物理学院                                                       |
| 16:30-17:00 | 会议总结<br>颁奖典礼暨闭幕式                                |                                                                                |
| 17:30-19:00 | 晚餐                                              |                                                                                |

| 2025 年 7 月 6 日，星期日（下午）                                                                                     |                                |                                            |
|------------------------------------------------------------------------------------------------------------|--------------------------------|--------------------------------------------|
| 地点：成都理工大学，九教-智慧教室 9B206<br>单元七：（1）活动构造、地貌学及地质环境工程方面的技术创新。<br>（2）用于地质灾害监测（如地震、滑坡）的近地表地球物理学最新进展。<br>单元主席：TBD |                                |                                            |
| 时间                                                                                                         | 报告题目                           | 报告人                                        |
| 14:00-14:20                                                                                                | 综合多种地球物理勘探方法和无人机数据以揭示加纳的英国殖民历史 | <b>Cyril D. Boateng</b> ，加纳恩克鲁玛科技大学（KNUST） |
| 14:20-14:40                                                                                                | 基于电阻率法的煤层覆岩结构稳定性探查             | <b>刘畅</b> ，安徽理工大学地球与环境学院                   |
| 14:40-15:00                                                                                                | 基于时移电阻率法的堤防渗漏隐患监测技术研究          | <b>申斌</b> ，东华理工大学地球物理与测控技术学院               |
| 15:00-15:20                                                                                                | 多维评价调控的自适应聚焦算法                 | <b>林欣</b> ，成都理工大学地球物理学院                    |
| 15:20-15:30                                                                                                | 茶歇                             |                                            |
| 15:30-15:50                                                                                                | 用于滑坡调查的高效三维机载探地雷达模拟和偏移成像       | <b>毛立峰</b> ，成都理工大学 地球物理学院                  |
| 15:50-16:10                                                                                                | 基于半机载电磁法的三维地质建模与稳定性评价          | <b>贾仕尧</b> ，成都理工大学地质灾害防治与地质环境保护全国重点实验室     |
| 16:10-16:30                                                                                                | 造山作用产生的天然裂缝连续损伤力学计算及其在顺北油田的应用  | <b>沈新普</b> ，中国石油大学（北京）                     |
| <u>16:30-17:00</u>                                                                                         | <u>会议总结，颁奖典礼暨闭幕式</u> （会议室-1）   |                                            |
| 17:30-19:00                                                                                                | 晚餐                             |                                            |

张贴报告单元-A

- (1) 浅层地震勘探新技术与新方法.
- (2) 用于地质灾害监测（如地震、滑坡）的近地表地球物理学最新进展.

| 2025 年 7 月 5 日，星期六（上午）                        |     |                                                  |                                 |
|-----------------------------------------------|-----|--------------------------------------------------|---------------------------------|
| 地点：国际学术报告厅 外大堂<br>时间：10:20-10:45<br>单元主席： TBD |     |                                                  |                                 |
| 时间                                            | 电子屏 | 报告题目                                             | 报告人                             |
| 10:15-10:20                                   | 1#  | 小道距面波在油气勘探表层结构调查中的应用研究                           | 巫骏， 中国石油集团东方地球物理勘探有限责任公司西南物探分公司 |
| 10:20-10:25                                   | 1#  | 广东连州九安地区天子岭滑坡地质灾害监测点的建设与形成机制分析                   | 张子文， 1. 广东工业大学；<br>2. 广州航海学院    |
| 10:25-10:30                                   | 1#  | 基于曲波变换的煤矿采区地震数据重建方法                              | 杨曦, 中煤科工西安研究院（集团）有限公司           |
| 10:30-10:35                                   | 1#  | 四川盆地深部密度结构成像与 2021 年 9 月 16 日四川泸县 Ms6.0 地震孕震背景分析 | 兰沐璟， 成都理工大学地球勘探与信息技术教育部重点实验室    |
| 10:35-10:40                                   | 1#  | 造山作用产生的天然裂缝连续损伤力学计算及其在顺北油田的应用                    | 沈新普， 中国石油大学（北京）                 |
| 10:15-10:20                                   | 2#  | 井约束的速度层析反演技术在复杂山区的应用                             | 张福宏， 中国石油集团东方地球物理勘探有限责任公司       |
| 10:20-10:25                                   | 2#  | 季节冻土区地下金属与非金属管线的识别                               | 廖天煜， 新疆大学信息科学与工程学院信号探测与处理重点实验室  |
| 10:25-10:30                                   | 2#  | 瞬变电磁法在黄土高原地区近地表速度结构调查中的应用                        | 杨云见， 中国石油集团东方地球物理勘探有限责任公司       |
| 10:30-10:35                                   | 2#  | 陆海重力观测揭示的沂沭断裂带重力深部结构与动力学特征                       | 庞琪沛， 中国地质大学（武汉）                 |
| 10:35-10:40                                   | 2#  | 基于微控制器的频率域地面穿透雷达系统设计                             | 辛翔， 成都理工大学                      |

张贴报告单元-B

- (1) 基于卫星 / 无人机的地质灾害遥感监测.
- (2) 用于预警、风险评估和缓解级联影响的先进技术和方法.
- (3) 活动构造、地貌学及地质环境工程方面的技术创新.
- (4) 机器学习 / 人工智能在解读复杂数据集方面的应用.

| 2025 年 7 月 5 日，星期六（下午）                        |     |                                |                                                                     |
|-----------------------------------------------|-----|--------------------------------|---------------------------------------------------------------------|
| 地点：国际学术报告厅 外大堂<br>时间：15:40-16:00<br>单元主席： TBD |     |                                |                                                                     |
| 时间                                            | 电子屏 | 报告题目                           | 报告人                                                                 |
| 15:40-15:45                                   | 1#  | 一种考虑地理环境相似性的图神经网络滑坡易发性评估方法     | 张清，1. 兰州交通大学测绘与地理信息学院； 2. 地理国情监测技术应用国家地方联合工程研究中心； 3. 甘肃省地理国情监测工程实验室 |
| 15:45-15:50                                   | 1#  | 基于随机森林的 TSP 和 TEM 集成方法用于隧道突水预测 | 廖俊艺，成都理工大学                                                          |
| 15:50-15:55                                   | 1#  | 微震智能监测技术研究                     | 刘博，1. 中国石油集团东方地球物理勘探有限责任公司； 2. 中油奥博（成都）科技有限公司                       |
| 15:55-16:00                                   | 1#  | 四川盆地三维磁性结构与基底特征                | 邓佳悦，成都理工大学地球勘探与信息技术教育部重点实验室                                         |
| 15:40-15:45                                   | 2#  | 近地表地球物理与机器学习在含水层脆弱性评估中的应用      | Umair Khan，中国科学院大学                                                  |
| 15:45-15:50                                   | 2#  | 基于代表性单元的土石混合体力学参数确定方法          | 马春林，西南石油大学地球科学与技术学院                                                 |
| 15:50-15:55                                   | 2#  | 基于深度学习的速度建模在含水层预测中的应用          | 马志军，吉林大学地球探测科学与技术学院，深部探测与成像全国重点实验室                                  |
| 15:55-16:00                                   | 2#  | 方域地形校正随量板半边长的变化分析              | 李小娜，西南财经大学天府学院工程与材料学院                                               |