2nd Czech-Taiwanese Geoscientific Workshop
29 - 30 April 2026, Czech Academy of Sciences, Narodni 3, Prague 1, Hall 206 -2nd floor

The aim of the workshop is to present the ongoing Taiwanese–Czech scientific cooperation since 2021 to the professional community, representatives of the Czech Academy of Sciences, and the broader scientific public in the Czech Republic. Invited lectures will highlight not only recent landslide-related research conducted by the Czech–Taiwanese research team, but also current geophysical investigations carried out in cooperation between Taiwanese experts and scientists from the Czech Academy of Sciences, Masaryk University and Brno University of Technology.

Programme:

Wednesday, 29 April

9:00 - 9:05   **Opening the Conference (Hall 206)**

9:05 - 9:15   Welcome words: Hartvich F. (Director of IRSM CAS)

JJ Dong (NCU), R-J Rau (NCKU), J-C Lee (IES AS)

9:15 - 9:30   Welcoming Address: Ting-Fu Hong (Director of Science and Technology Division in Prague, Taipei Economic and Cultural Office in Czech Republic)

Scientific sessions:

Landslide monitoring and early warning

9:30 - 9:50   Rau, Ruey-Juin: Long-Term Monitoring of Slope Stability: Nonlinear Site Responses to Earthquakes and Heavy Rainfall (NCKU)

9:50 - 10:10   Yin, Hsiao-Yuan (online): Scientific Cooperation on Geohazard Mitigation and Climate Change Adaptation between the Czech Republic and Taiwan (ARDSWC)

10:10 - 10:40   Yang, Che-Ming (online): Geomorphic and Kinematic Reconstruction of the 2025 Mataian Giant Landslide and Dam-Breach Cascade in Eastern Taiwan (online) (NTUST)

10:40 - 11:00   Lovisolo, Mario: Deep subsurface monitoring in active landslides with "DMS® multi-parametric columns, from observation to Early Warning and design of physical countermeasures (Geoservizi)

11:00 - 11:20   Coffee Break

(Micro)seismicity:

11:20 – 11:40   Burjánek, Jan: How natural ground vibrations help us understand unstable slopes (IGPH CAS)

11:40 – 12:00   Wu, Cheng-Feng (online): Rapid Assessment of Landslide Subsurface Structure and Sliding Potential Using Microtremor Measurements (NCKU)

12:00 – 12:20   Tseng, Chia-Han: Potential of Slope Failure Revealed by Microtremor: Cases in the Czech Republic (CCU)

12:20 – 12:40 Ku, Chin-Shang: Deep learning–based detection of seismic and non-conventional events using downhole distributed acoustic sensing (DAS) for near-real-time well stability monitoring (IES AS)

12:40 – 14:00   Lunch

Present-day tectonic activity:

14:00 - 14:20   Lee, Jian-Cheng: A two-opposing-thrust system in the Longitudinal Valley in eastern Taiwan under an oblique convergence at the plate suture between the Philippines Sea plate and Eurasia (IES AS)

14:20 - 14:40   Canitano, Alexandre: High-resolution strain measurements for characterizing aseismic deformation in the Longitudinal Valley, Taiwan (IES AS)

14:40 - 15:00   Baroň, Ivo: Active Fault Kinematic Behaviour in Taiwan Revealed from Novel Contactless Magnetic and Laser 3D-Positioning Systems (IRSM CAS)

15:00 - 15:20   Ching, Kuo-En: Modern Geodetic Technologies for Disaster Monitoring and Mitigation in Mudstone-Dominated Area of SW Taiwan (NCKU)

15:20 - 15:50   Coffee Break

Fault and landslide structure paleoseismologic implications:

15:50 - 16:10   Kuo, Li-Wei: How Fault Structure Affects the Characteristics of Seismic Slip Records and Faulting Mechanisms (NCU)

16:10 - 16:30   Nguyen, Túng: Reconstructing Paleoseismicity in the Stabilized Accretionary Wedge of the Outer Western Carpathians: Constraints from Deep-seated Landslides and Under-dip Toppling (NCU)

16:30 - 16:50   Baroň, Ivo: Hypermobile Prehistoric Landslides in the Outer Western Carpathians: Spatio-temporal Occurence and Implications for Seismic Hazard (IRSM CAS)

16:50 - 17:10   Dušek, Václav: Using Anisotropy of Magnetic Susceptibility to Map Deformation Domains and Stacked Events in Landslide Deposits (MU)

17:10 - 17:30   Coffee Break

Poster session

17:30 - 18:30

Wu, Yen-Cheng: Application of Microtremor Exploration to Characterize Landslide Features in the Czech Republic (CCU)

Yen, Dong-Kai: Microtremor Data Analysis and Its Application to Fault Characterization: A Case Study of the KanJiao Fault, Taiwan (CCU)

Rowberry, Matt: Tidal Signals in the Creepmeter Time Series Using a Model-based Workflow (IRSM CAS)

Rajkumar: Identification of Slow Slip Events in the Longitudinal Valley, Taiwan, Using Machine Learning (IES AS)

Klimeš, Jan: Engineering Geological Model of Deep-seated Landslide in Flysch Rock – Use of Geophysical and Field Investigations (IRSM)

Stripajova, Svetlana: Comprehensive Landslide Risk Assessment in Catastrophe Models: A Case Study for Italy (AON)

19:00 Invited dinner

Please direct any questions regarding the workshop to registering email: **CZ-TW_Workshop2026@irsm.cas.cz**