

# 6月16日議程 June 16<sup>th</sup> Sessions

[GS] 2025 中華民國地球物理學會及中華民國地質學會年會暨學術研討會  
2025 Annual Conference of Chinese Taipei Geophysical Society &  
Geological Society Located in Taipei

GS01

Room 402a

[GS-GP1] 地球物理、地球物理探勘與環境地球物理/人工智慧應用於  
地球物理

Geophysics, Geophysical Investigation and Environmental Geophysics / Artificial  
Intelligence Applications in Geophysics

主持人：曾佳漢

09:08 - 09:20 GS01-001

Local patches of negative core-mantle boundary heat flux in numerical  
simulations of thermo-chemical convection

Frédéric Deschamps, Joshua Guerrero

09:20 - 09:32 GS01-002

A Stochastic Dynamic Model of Earthquake Rupture: Exploring Self-Similarity  
and the Fisher-Shannon Characterization in Frictional Failure Processes

Tsung-Hsi Wu, Chien-Chih Chen, Hong-Jia Chen, Li-Wei Kuo, Luciano Telesca,  
Michele Lovallo

09:32 - 09:44 GS01-003

Sequential Inversion of Seismic and Gravity Data for Full-Crust Imaging in  
Taiwan

Yu-Tsung Lo, Horng-Yuan Yen

09:44 - 09:56 GS01-004

Waveform Polarity Determination via Deep Learning and Its Application in Focal  
Mechanism Inversion

Ting-Chung Huang, Chia-Yueh Yang, Yih-Min Wu

09:56 - 10:08 GS01-005

利用微地動分析探討台灣北部大屯火山區的淺層地質構造

朱柏宇、曾佳漢、饒瑞鈞、吳澄峰

GS01

Room 402a

[GS-M1] 多維尺度地物與地化之孕震過程觀測

Multidimensional Geophysical and Geochemical Observations for Earthquake  
Generation Process

主持人：郭陳澔、傅慶州

10:20 - 10:32	<b>GS01-006</b>
	3D Upper Crustal Shear-Wave Velocity Model of Eastern Taiwan from Ambient Noise Tomography with Dense Seismic Arrays
	<b>Kuo-ChenHao, ChengChing-Yu, DennisBrown, Yenl-Chin, ChenKai-Xun, SunWei-Fang, GuanZhuo-Kang, LiangShen-Hsiung, ChenWen-Shan, HoChun-Wei</b>
10:32 - 10:44	<b>GS01-007</b>
	池上光纖地震儀訊號特性分析 <b>甘禮有、郭陳澔、管卓康、曾智杰、古進上、傅慶州</b>
10:44 - 10:56	<b>GS01-008</b>
	池上地震觀測網及池上即時微震監測系統 <b>孫維芳、郭陳澔、傅慶州、潘勝彥、劉耀宏、古進上、管卓康</b>
10:56 - 11:08	<b>GS01-009</b>
	花東縱谷南段池上斷層之震測影像與構造解析 <b>管卓康、郭陳澔、傅慶州、牟鍾香、梁勝雄</b>
11:08 - 11:20	<b>GS01-010</b>
	Seismic Modulation of CO <sub>2</sub> Degassing in the Fault Zone: Insights from Two Major Earthquakes in Adjacent Fault Systems <b>Ching-Chou Fu, Kuo-Hang Chen, Kuo-Wei Wu, Chung-Hsiang Mu, Pei-Ling Wang, Hao Kuo-Chen, Li-Hung Lin, Vivek Walia</b>
11:20 - 11:32	<b>GS01-011</b>
	Near-Surface Geological Structures of the Southern Longitudinal Valley Fault in Taiwan <b>LiangShen-Hsiung, YouCian-Siang, HsiehCheng-En, TungYu-Siang, LiuYen-Chiu, Kuo-ChenHao</b>
11:32 - 11:44	<b>GS01-012</b>
	區域性地電訊號與地震活動之關聯研究：以花蓮與嘉義為例 <b>陳宏嘉</b>
11:44 - 11:56	<b>GS01-013</b>
	DAS 與寬頻地震儀資料整合於即時觀測系統之應用 <b>古進上、傅慶州、郭陳澔、牟鍾香、孫維芳、管卓康、甘禮有</b>

**GS01**

**Room 402a**

## [GS-S5] 0403 花蓮地震的研究發展

**Research Progress on the Hualien Earthquake on 3rd Apr. 2024**

主持人：陳卉瑄、許雅儒

15:30 - 15:42	<b>GS01-014</b>
	A Comparative Analysis of the (ML 6.8; Mw 7.3) November 14, 1986, and (ML 7.1; Mw 7.4) April 2, 2024, Hualien, Taiwan earthquakes: Insights into Seismic Characteristics and Regional Impact

	<b>Kuo-Fong Ma, Shiann-Jong Lee, JoLan Liao</b>
15:42 - 15:54	<b>GS01-015</b> Aseismic slip and seismic swarms leading up to the 2024 M7.3 Hualien earthquake <b>Kate Huihsuan Chen, Wei Peng, Ya-Ju Hsu, Yan-Hong Chen</b>
15:54 - 16:06	<b>GS01-016</b> Unraveling fault slip dynamics in northern Longitudinal Valley: insights from coseismic ruptures, aseismic slip, and seismicity <b>YA-JU HSU, Hsin Tung, Horng-Yue Chen, Yu Wang, Yan-Hong Chen, Yunung Nina Lin, Wei Peng, Huihsuan Kate Chen, Huang Hsin-Hua</b>
16:06 - 16:18	<b>GS01-017</b> Deciphering the Multi-Fault System of the 2024 Mw 7.4 Hualien, Taiwan Earthquake Using Seismic and Geodetic Datasets <b>Claire Fagan, Mong-Han Huang, Hsin-Hua Huang</b>
16:18 - 16:30	<b>GS01-018</b> Tracing the Storm and the Shake: Can Sediments Tell Earthquakes from Typhoons? <b>Yu-Shih Lin, Yu-Ting Hung, Jyh-Jaan Steven Huang, Ludvig Löwemark, Pai-Sen Yu, Bing-Rong Jiang, Huan-Jie Shao, Ho-Han Hsu, Liwen Chen, Yuan-Pin Chang</b>
16:30 - 16:42	<b>GS01-019</b> Coastal uplifts and tsunami run-up associated with the 2024 Mw 7.4 Hualien earthquake <b>Yu Wang, Sheng-Han Wu, Yu-Nung Nina Lin, Hsin Tung, Siang Duan, Zong-Ka Huang</b>
16:42 - 16:54	<b>GS01-020</b> The Improvement of Tsunami Source Model for the 2024 Mw 7.4 Hualien Earthquake: Insight from USGS Moment Tensor, GCMT Moment Tensor, and USGS Finite Fault <b>Achmad Prasetia Budi, Tso Ren Wu</b>

**GS02**

**Room 402b**

## [GS-M2] 慢至快地震的震源物理研究

### Source Physics of Slow-to-Fast Earthquake

主持人：郭力維、柯俊宇

09:08 - 09:20	<b>GS02-001</b> Generating Slow to Fast Earthquakes in the Lab: An Update to Fault Zone Geology Lab <b>Li-Wei Kuo, Jia-Jyun Dong, Szu-Ting Kuo, Chien-Cheng Hung, Thi Trinh Nguyen, Fang-Yu Tsai, Ting-Yen Tai, Yun Ya Ling, Meng-Chin Lee, Yu-Qing Huang, Wan-Hong Hsu, Wen-Jie Wu</b>
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09:20 - 09:32	<b>GS02-002</b> Current progress of the gouge triaxial direct-shear experiments in Taiwan <b>Ting-Yen Tai, Zhan-You Kuo, Szu-Ting Kuo, Li-Wei Kuo, Maciej Trzeciak, Hiroki Sone</b>
09:32 - 09:44	<b>GS02-003</b> An Experimental Study on Fracture Slip and Healing Processes in Geothermal Environments <b>Fang-Yu Tsai, Li-Wei Kuo, Szu-Ting Kuo</b>
09:44 - 09:56	<b>GS02-004</b> 斷層帶粉碎岩石的發現與隱示 <b>吳文傑、連珀穎、黃騰慧、郭力維</b>
09:56 - 10:08	<b>GS02-005</b> The Yuli-belt-rock-bearing Milun fault and its implication for local structural evolution <b>Pei-Chi Chiang, Li-Wei Kuo, Kuo-Fong Ma, Yun Ya Ling</b>
主持人：柯俊宇、郭思廷	
10:20 - 10:32	<b>GS02-006</b> Fluid pressurization in overconsolidated sediments: A seismic indicator at the shallow subduction front <b>Szu-Ting Kuo, Thi Trinh Nguyen, Jianye Chen, Wen-Jie Wu, Kohtaro Ujiie, Li-Wei Kuo</b>
10:32 - 10:44	<b>GS02-007</b> Effect of clay content on frictional behavior of simulated gouges at seismic rates: Binary and ternary mixtures of quartz, illite, and kaolinite <b>Thi Trinh Nguyen, Li-Wei Kuo, Szu-Ting Kuo</b>
10:44 - 10:56	<b>GS02-008</b> The Role of Liquid and Vapor Water on the Fault Frictional properties in the Krafla Geothermal Field (Iceland) <b>Wei-Hsin Wu, Wei Feng, Rodrigo Gomila, Telemaco Tesei, Anette K. Mortensen, Giulio Di Toro</b>
10:56 - 11:08	<b>GS02-009</b> Principal Slip Zone Characteristics of the Milun Fault from Microstructural and Mineralogical Observations <b>Yun Ya Ling, Li-Wei Kuo, Kuo-Fong Ma</b>
11:08 - 11:20	<b>GS02-010</b> Frictional Behavior of the Active Milun Fault Zone During Experimental Seismic Slip <b>Meng-Chin Lee, Li-Wei Kuo, Thi Trinh Nguyen, Yun Ya Ling, Kuo-Fong Ma</b>
11:20 - 11:32	<b>GS02-011</b> Mechanical properties of the formation rocks at the enhanced geothermal system in Yuanshan, northeastern Taiwan

**Yu-Qing Huang, Li-Wei Kuo, Szu-Ting Kuo, Fang-Yu Tsai, Ting-Yen Tai, Zhan-You Kuo**

主持人 : 郭思廷、洪建程

15:18 - 15:30	<b>GS02-012</b> Broadband Calibration of Ultrasonic Transducers Using Generalized Ray Theory, Finite Element Method, and Laser Doppler Vibrometry <b>Ting-Wei Liu, Chang-Wei Zeng, Chun-Yu Ke</b>
15:30 - 15:42	<b>GS02-013</b> Earthquake Rupture Initiation Location and Fault Overstress Geometry Shape the Evolution of Source Time Functions <b>Cheng-Yi Wang, Chun-Yu Ke</b>
15:42 - 15:54	<b>GS02-014</b> Evaluating Variability in Seismologically-Estimated Stress Drop in Earthquake Ruptures with Negative Overstress Boundaries <b>You-Shi Tsai, Chun-Yu Ke</b>
15:54 - 16:06	<b>GS02-015</b> Exploring the Impact of Subducted Sediment Properties, Shear Heating, and Dehydration on Seismicity in Subduction Zones Using MEFISTO <b>Chia-Hsun Lin, Jiaqi Fang, Wei Mao, Ema Armstrong, Zechao Zhuo, John N. Hooker, Donald Fisher, Tan Eh, Greg Hirth, Magali I. Billen</b>
16:06 - 16:18	<b>GS02-016</b> Inferring Earthquake Stress Drops with Passive Acoustics in Laboratory Experiments Using Machine Learning <b>Gauss Chang, Chris Marone, Chun-Yu Ke</b>
16:18 - 16:30	<b>GS02-017</b> Seismicity Migration along the Deformation Front Offshore Southwest Taiwan <b>Wen-Nan Wu</b>
16:30 - 16:42	<b>GS02-018</b> Stress Test: Earthquake Cycles Under Different Loading Conditions <b>Yifan Yin, Camilla Cattania</b>
16:42 - 16:54	<b>GS02-019</b> Stress transfer cycle from slow to fast earthquakes across the southernmost Ryukyu subduction thrust during deep slow slip <b>Sean Kuanhsiang Chen</b>

**GS03**

**Room 402c**

**[GS-GT] 地球科學技術**  
**Geoscience Technology**

主持人 : 林慶仁

09:20 - 09:32    **GS03-001**

SEISYNC：基於人工智慧驅動的模組化地震監測系統同步地震預警與地震  
目錄製作  
廖勿渝、Florent Aden-Antoniów、李恩瑞

09:32 - 09:44	<b>GS03-002</b> Utilizing pig urine as a sustainable urea substitute in Microbial Induced Calcite Precipitation (MICP) for soil stabilization <b>Md. Taharia, Gobinda Dey, Raju Kumar Sharma, Chin-Wen Wang, Shafiqa Ali, Pin-Yun Lin, Chien-Yen Chen*</b>
09:44 - 09:56	<b>GS03-003</b> 從光譜到熱史：紅外光譜技術在地質溫度重建中的新應用 <b>陳彥宇、呆紹伊、張英如、謝文斌</b>
09:56 - 10:08	<b>GS03-004</b> 新型 Yardbird-BB OBS 感震器平衡機構的效能評估 <b>林慶仁、張家溥、陳柏棋</b>

**GS03**

**Room 402c**

**[GS-S4] 觀測地震學**

**Observational Seismology**

主持人：梁文宗

10:20 - 10:32	<b>GS03-005</b> High-Resolution Attenuation Tomography with SALUTE: Unraveling Fault Systems and Forearc Deformation in the Southern Taiwan Collision Zone <b>Yu-Pin Lin, Shu-Huei Hung, Scientific Team of Southern Array for the Lithosphere and Uplift of Taiwan Experiment</b>
10:32 - 10:44	<b>GS03-006</b> New Web Services of Broadband Array in Taiwan for Seismology (BATS) <b>Wen-Tzong Liang, Wen-Hui Lee, Po-Yu Chen, Hao-De Chiu, Chin-Shang Ku</b>
10:44 - 10:56	<b>GS03-007</b> 以卡爾曼濾波器即時修正地震動預估：導入破裂方向性於地震預警系統 <b>黃奕昇、黃信樺</b>
10:56 - 11:08	<b>GS03-008</b> 陣列分析近震源地動紀錄探討 2023 年 9 月屏東化學品爆炸事件 <b>黃柏壽、何美儀、古進上、林欽仁</b>

**GS03**

**Room 402c**

**[GS-V5] 台日聯合議程—地球化學與地質研究的新進展**

**Taiwan-Japan Joint Session-Frontiers in Geochemistry and Geology**

主持人：王國龍

15:30 - 15:50	<b>GS03-009</b>
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High-precision measurements of the triple oxygen isotope compositions of phosphate in bioapatite for reconstructing body temperature of extinct marine vertebrates

**Takashi Sambuichi, Urumu Tsunogai, Fumiko Nakagawa**

15:50 - 16:10

**GS03-010**

Lithological and geochemical evidence for the linkages between OAE1a and Ontong Java volcanic events at Deep Sea Drilling Program Site167

**Hironao Matsumoto, Takeshi Hanyu, Takashi Miyazaki, Qing Chang, Bogdan S. Vaglarov, Maria Luisa G. Tejada, Junichiro Kuroda, Katsuhiko Suzuki**

16:10 - 16:30

**GS03-011**

Recycling ages of oceanic crusts: implications from FOZO and HIMU type OIBs  
**Shimoda Gen, Kogiso Tetsu**

16:30 - 16:45

**GS03-012**

Preliminary geochemical results from orogenic peridotites from Eastern Alaska and Northern British Columbia

**John Gregory Shellnutt, Kuo-Lung Wang**

16:45 - 17:00

**GS03-013**

Mantle perspective on the boundary between the Eurasian continent and the Philippine Sea plates in Taiwan

**Kuo-Lung Wang, Duyen Tri Tran, Kourim Fatna, Yoshiyuki Iizu, Hao-Yang Lee**

**GS04**

**Room 403**

## [GS-ST3] 2025 年臺灣第四紀暨東南亞第四紀研討會議 - 人類世環境與氣候變遷

### 15th TAI-QUA and 1st SEA-QUA - Anthropocene Environment and Climate Changes

主持人：沈川洲、羅立

08:44 - 08:56

**GS04-001**

Rapid Assessment of Elemental Radial Translocation and Mobility in Tree Rings Using iTrax Core Scanner

**Hsin-Lin Wei, Chuan-Chou Shen, Ludvig Löwemark, Chien-Yi Liao, Shu-Li Chen, Chun-Kuang Hsieh**

08:56 - 09:20

**GS04-002**

Towards a Low-Pollution Future: Lessons from Leaded Gasoline for the Global Energy Transition

**Mengli Chen, Dominik Weiss, Qian Na, Ke Lin, Jani Tanzil, Edward Boyle, Nathalie Goodkin**

09:20 - 09:32

**GS04-003**

氣候變化與病蟲害：清代蝗災的氣候驅動因素分析

**王證豪、林冠慧、曾琬鈴、林正偉、黃信誠、王寶貴**

09:32 - 09:44	<b>GS04-004</b>
	A multi-proxy lacustrine record of late Holocene climatic variability from north India
	<b>Mohd Amir, Debajyoti Paul, Yuan-Pin Chang</b>
09:44 - 10:08	<b>GS04-005</b>
	Reconstructing Long-Term Tropical Cyclone Activity from Tree Rings: Insights and Interdisciplinary Perspectives
	<b>Altman J.</b>

**GS04**

**Room 403**

## [GS-ST4] 2025 年臺灣第四紀暨東南亞第四紀研討會議 - 陸相記錄 15th TAI-QUA and 1st SEA-QUA - Terrestrial Records

主持人：沈川洲、羅立

10:20 - 10:32	<b>GS04-006</b>
	A New Palynological Record of the Last Millennium from a Sediment Core in Lake Marmara, Western Türkiye
	<b>Mesut Kolbüken, Demet Biltekin, Tom Veldkamp, Dursun Acar</b>
10:32 - 10:56	<b>GS04-007</b>
	Expanding the Paleoclimate Toolbox: 3-OH Fatty Acids as a Palaeothermometry Proxy
	<b>Yamoah Kweku Afrifa, Patthapong Chaiseanwang, Changhai Hou, Matthew Allison, Alice Hardman, Michael Griffiths, Sarah Greene, James Bendle</b>
10:56 - 11:08	<b>GS04-008</b>
	Late Holocene Decoupling of East Asian and Indian Summer Monsoons Linked to Tropical Ocean-Atmosphere Forcing
	<b>Phanindra Reddy Annapureddy, Naveen Gandhi, Chuan-Chou SHEN, Madhusudan G Yadava, Chun- Yuan Huang</b>
11:08 - 11:20	<b>GS04-009</b>
	Linking lacustrine, dendrochronological, historical, and instrumental records: Pitfalls and potentials
	<b>Ludvig Löwemark</b>
11:20 - 11:32	<b>GS04-010</b>
	Monsoon systems: variability, processes, predictability, change and extremes
	<b>Wan-Ling Tseng, Elaine Kuanhui Lin, Hsin-Cheng Huang, Chao-Chen Lai, Jen-Ing Lee, Ho-Jiunn Lin, Cheng-Wei Lin, Huang-Hsiung Hsu, Pao K. Wang</b>
11:32 - 11:44	<b>GS04-011</b>
	Stalagmite-based Paleo-hydroclimate Variability of the Eastern Mediterranean over the past 46 ka

	<b>Mesut Kolbüken, Chuan-Chou Shen, Chun-Yuan Huang, Hsun-Ming Hu, Mehmet Oruç Baykara, Ezgi Ünal-İmer, Bülent Arıkan, Phanindra Reddy, Yueh-Yang Lee</b>
11:44 - 11:56	<b>GS04-012</b> Reconstruction of northern Taiwan hydroclimate conditions over last 13.3 cal kyr BP using multiproxy analysis in Tsui-Tsui Valley sediment cores <b>Abdur Rahman, Liang-Chi Wang</b>
11:56 - 12:20	<b>GS04-013</b> Geochemistry of paleo-Yamuna channel sediments from NW India: Implications for variations in provenance, paleoclimate, and paleovegetation patterns in the late Quaternary <b>Debajyoti Paul, Mohd Amir, Yuan-Pin Chang</b>
12:20 - 12:32	<b>GS04-014</b> The preliminary report of diatom assemblages from a 50 m core sample at Paitan Lake, Luzon Island, Philippines <b>Kaoru Kashima, Liang-Chi Wang</b>
12:32 - 12:56	<b>GS04-015</b> Hydroclimate Variability in the Mainland Southeast Asia during the Last Glacial Maximum <b>Akkaneewut Jirapinyakul, Dissaya Sukudom, Chawalit Charoenpong, Penja Sompongchaikul, Paramitra Punwong, Kweku Afrifa Yamoah</b>

## GS04

Room 403

### [GS-ST5] 2025 年臺灣第四紀暨東南亞第四紀研討會議 - 海相記錄

#### 15th TAI-QUA and 1st SEA-QUA - Marine Records

主持人：沈川洲、羅立

15:18 - 15:30	<b>GS04-016</b> A 100-year record of nearshore fish ecological changes in the Taiwan Strait <b>Zi-Qi Chew, Chih-Chieh Su, Sheng-Ting Hsu, Chien-Hsiang Lin</b>
15:30 - 15:54	<b>GS04-017</b> Changes in the Tsushima Warm Current Systems in the Japan Sea Throughout the Holocene <b>Kenji M. Matsuzaki, Takuya Itaki, Takuya Sagawa, Yoshiaki Suzuki, Tonohisa Irino, Ken Ikehara</b>
15:54 - 16:06	<b>GS04-018</b> How reactive is permafrost after thawing? Changes in permafrost organic matter reactivities across the land-to-shelf transect in the Laptev Sea, Arctic <b>Tsai-Wen Lin, Gernot Nehrke, Hendrik Grotheer, Tommaso Tesi, Gesine Mollenhauer</b>
16:06 - 16:18	<b>GS04-019</b> Kaoping slope marine carbon sink variations during the past 150 kyrs

	<b>Chuang Chih-kai, Lin Andrew Tien-shun, Lo Li</b>
16:18 - 16:30	<b>GS04-020</b> Surface condition of the middle Pliocene warm period in the southwestern equatorial Pacific Ocean <b>Li Lo, Tien-Yu Wu, Chieh-Yu Huang, Ying-Ying Ho, Chuan-Chou Shen, Horng-Sheng Mii, Ludvig Löwemark</b>
16:30 - 16:54	<b>GS04-021</b> Upper ocean stratification changes in the western tropical Pacific for the last 4 Myr <b>Takuya Sagawa, Yoshimi Kubota, Yair Rosenthal</b>

**GS05**

**Room 503**

## [OCGS-MG] 海洋地質與地球物理

### Marine Geology and Geophysics

主持人：張頌平、王天楷

08:32 - 08:44	<b>GS05-001</b> Geometrical & hydrological dependence of seamount subduction on slip tendency: Does it promote or suppress interplate locking? <b>Masataka Kinoshita, Rie Nakata, Yoshitaka Hashimoto, Yohei Hamada, Luisa Roeckel, Hung-Yu Wu</b>
08:44 - 08:56	<b>GS05-002</b> Deep-Sea Turbidites of the Huatung Basin and SW Ryukyu Trench <b>Kan-Hsi Hsiung, Yu-Chun Chang, Yuhji Yamamoto, Toshiya Kanamatsu, Kenichiro Tani</b>
08:56 - 09:08	<b>GS05-003</b> Distinct Characteristics of Nepheloid Layers Triggered by the 2024 Hualien Earthquake (Mw 7.4) and Super Typhoon Kong-rey <b>Yu-Shih Lin, Shu-Ying Chuang, Ho-Han Hsu, Tsui-Yu Emmy Chang, Chih-Chieh Su, Tzu-Ting Chen, Yu Wang, Yuan-Pin Chang</b>
09:08 - 09:20	<b>GS05-004</b> Widespread Thick Turbidites in the Kuril Trench: Possible Evidence of a Mw~9 Earthquake in the 13th Century? <b>Yu-Chun Chang, Kan-Hsi Hsiung, Kanamatsu Toshiya, Ryo Nakanishi, Yuhji Yamamoto, Go-Ichiro Uramoto</b>
09:20 - 09:32	<b>GS05-005</b> High-precision dating using palaeomagnetic secular variation Its applications and limitations for deep-sea sediment geochronology: A case study from the Japan Trench <b>Toshiya Kanamatsu, Yuhji Yamamoto, Kan-Hsi Hsiung, Yu-Chun Chang</b>
09:32 - 09:44	<b>GS05-006</b>

		內波與山崩動力耦合作用下霞狀層的形成 張哲瀚、吳祚任、葉宸豪
09:44 - 09:56	<b>GS05-007</b>	甲烷煙囪源著底棲性海底生物洞穴形成流體通道的直接證據—來自台灣中部的化石紀錄 <b>BlouetJean-Philippe, WetzelAndreas, 何雪盈 Sutieng HO</b>
09:56 - 10:08	<b>GS05-008</b>	以海床地電阻影像探尋掩埋的水下文資目標物 陳麗雯、劉興昌、林俊宏
10:20 - 10:32	<b>GS05-009</b>	臺灣海峽北部高解析震測沉積構造和斷層構造研究 蘇永祥、王天楷
10:32 - 10:44	<b>GS05-010</b>	台灣海峽海域玄武岩層底尺度之空間分布 張頌平、林佩蓁、許鶴瀚、王明、陳憶萍、林育璿、陳松春、林依蓉、蘇品如
10:44 - 10:56	<b>GS05-011</b>	運用多頻道反射震測資料分析花蓮外海的米崙斷層構造 阮琮晏、王天楷、戚務正、黃薇、詹御榮、莫山
10:56 - 11:08	<b>GS05-012</b>	震測反演苗栗近岸-離岸的淺層地殼 詹御榮、王天楷、戚務正
11:08 - 11:20	<b>GS05-013</b>	沉積物懸浮行為之數值研究：濃度梯度法與不連續雙黏性流模型之整合與應用 葉宸豪、吳祚任、張哲瀚
11:20 - 11:32	<b>GS05-014</b>	臺灣周圍海域離岸風場海域洋流及地質環境分析-不連續雙黏性流模式於離岸風機沖刷模擬之應用探討 吳祚任、黃逸軒、朱家傑、黃文正、陳崇賢、羅仁男、黃天輿、陳冠宇、李奕亨
11:32 - 11:44	<b>GS05-015</b>	臺灣周圍海域離岸風場海域洋流及地質環境分析-離岸風電風力機對於水文影響分析 朱家傑、吳祚任、黃文正、陳崇賢、羅仁男、黃天輿、陳冠宇、李奕亨
11:44 - 11:56	<b>GS05-016</b>	臺灣離岸風電地質與環境感知系統發展成果與未來可應用領域研究 陳家生、陳松春、蘇品如、林依蓉、潘怡光、陳玉鷺、吳尚青

## [GS-B] 生物地球科學

### Biogeosciences

主持人：塗子萱

15:18 - 15:30 **GS05-017**

Comparing Metabolic Rates Between Seagrass Monocultures and Coral-Seagrass Systems: A Winter Assessment from Dongsha Island

**Tzu-Hsuan Tu, En-Ju Lin, Hsiang-Lun Huang**

15:30 - 15:42 **GS05-018**

Relative importance of nanoflagellate grazing and viral lysis for bacterial and *Synechococcus* spp. mortality in a high-latitude fjord (Adventfjorden, Svalbard) during the summer

**Madeline Olivia, Ruei-Feng Shiu, Patrick Wei-Yi Chen, Chia-Mei Chang, Clara Natalie Annabel, Chuen-Fa Ni, Hwa Chien, Slawomir Jack Giletycz, An-Yi Tsai**

15:42 - 15:54 **GS05-019**

Enhanced Atmospheric Nitrogen and Phosphorus Deposition Alleviates Phosphate Limitation in the Western North Pacific

**Vicente Gadngay Abedneko**

15:54 - 16:06 **GS05-020**

高屏溪流域有機碳來源及微生物分解作用的時空變化

**盧珮軒、塗子萱、林恩如、林佑珊**

16:06 - 16:18 **GS05-021**

Tracing GDGT and n-Alkane distribution patterns in the Central Arctic Ocean During the Last Glacial Cycle

**Akanksha Singh, Sze Ling Ho, Ludvig Löwemark**

16:18 - 16:30 **GS05-022**

Examination of evolutionary development and ontogenetic variation in the foraminifera *Globigerinoidesella fistulosa* during the Plio-Pleistocene transition interval using 3D morphometric analysis

**Robert Swisher, Li Lo, Yen-Fang Song, Gung-Chian Yin**

16:30 - 16:42 **GS05-023**

伯格曼規則與艾倫規則於竊蛋龍類恐龍的適用性 The validity of Bergmann's rule and Allen's rule in Oviraptorosauria

**朱立安、周冠宇、劉英明、楊子睿**

16:42 - 16:54 **GS05-024**

混魚龍屬 (*Ichthyosauria: Mixosauridae*) 的發聲方式與生長模式 Acoustic communication in, and ontogenetic stage of *Mixosaurus* sp. (*Ichthyosauria: Mixosauridae*)

**張郁忻、廖俊棋、劉英明、楊子睿**



# 6月 17 日議程 June 17<sup>th</sup> Sessions

[GS] 2025 中華民國地球物理學會及中華民國地質學會年會暨學術研討會  
2025 Annual Conference of Chinese Taipei Geophysical Society &  
Geological Society Located in Taipei

## 會員大會

Room 402

12:00 - 14:00 地質學會會員大會

## 地科學門座談會

Room 402c

主持人：陳卉瑄、詹瑜璋

14:30 - 15:00 國科會計畫審查原則說明

15:00 - 15:30 最新「顯著災害地震之近即時科學調查」計畫說明會

15:30 - 15:45 最佳計畫審查人頒獎

15:45 - 16:00 最佳大專生創作獎

16:00 - 16:30 座談時間

## GS06

Room 402a

### [GS-NH1] 山崩與土石流災害

#### Landslide and Debris Flow

主持人：楊哲銘、張睿明

08:50 - 09:02 GS06-001

Environmental Seismology for Landslide(I): Universal Machine Learning Model for Landslide Detection

Jui-Ming Chang, Wei-An Chao

09:02 - 09:14 GS06-002

全監督式深度學習模型於山崩判釋之應用

簡留玄、吳庭瑜、陳德偉、余執彰、許晉璋、謝有忠、盧詩丁

09:14 - 09:26 GS06-003

Environmental Seismology for Landslide (II): A Power-Law Relationship Governing the Propagation of Rockfall-Induced Seismic Waves

Jui-Ming Chang, Wei-An Chao, Che-Ming Yang, Ming-Wan Huang

09:26 - 09:38 GS06-004

Evaluation of wildfires and rockfall assessment in Alishan region through rainfall and granite analysis

Raju Kumar Sharma, Gobinda Dey, Pin-Yun Lin, Chin-Wen Wang, Md. Taharia, Shafiqa Ali, Max James Fulgence, Chien-Yen Chen

09:38 - 09:50 GS06-005

應用 UAV-LiDAR 與 MT-InSAR 技術於大規模崩塌潛勢區之熱區監測與工程 治理效益評估	
區雪儀、陳柔妃、張國楨、郭志禹、陳振宇、詹坤哲、林恩如	
09:50 - 10:02	<b>GS06-006</b> Monitoring Rainfall-Induced Landslides and Post-Disturbance Vegetation Dynamics Using Multi-Temporal Satellite Analysis <b>Mohammad Adil Aman, Hone-Jay Chu, Sumriti Ranjan Patra</b>
10:14 - 10:26	<b>GS06-007</b> 以光流技術應用於潛在大規模崩塌地表位移初探 <b>蘇祐鼎、謝有忠、許晉瑋、孫武群、郭麟霖、陳勉銘</b>
10:26 - 10:38	<b>GS06-008</b> 潛在大規模崩塌地形特徵與關注場址活動度之評估與統計 <b>楊哲銘、楊斯涵、陳貞伶、魏倫瑋、陳德偉、吳庭瑜、曾佳漢、許晉瑋、謝有忠</b>
10:38 - 10:50	<b>GS06-009</b> 應用地動訊號解析深層滑坡潛勢與滑動特徵之研究 <b>吳澄峰、饒瑞鈞、陳英琪、張睿、曾佳漢、Jan Burjánek</b>
10:50 - 11:02	<b>GS06-010</b> 應用分類分級方法評定潛在大規模崩塌之潛勢分級與活動性 <b>吳庭瑜、陳德偉、魏倫瑋、楊哲銘、曾佳漢、許晉瑋、謝有忠、盧詩丁、陳勉銘</b>
11:02 - 11:14	<b>GS06-011</b> 霧社水庫集水區邊坡大規模崩塌活動性時序觀測 <b>謝有忠、戴東霖、許晉瑋、朱偉嘉、蘇祐鼎、孫武群、劉建麟</b>
11:14 - 11:26	<b>GS06-012</b> Environmental Seismology for Landslide (III): A Seismic-Based Warning System for Rockfall Mitigation on Roadside Slopes Impacted by the 2024 Hualien Earthquake <b>Jui-Ming Chang, Wei-An Chao, Ming-Wan Huang, Che-Ming Yang</b>

**GS06**

**Room 402a**

## [GS-S6] 2025 大埔地震專題

### 2025 Dapu Earthquake Special

主持人：溫怡瑛、溫土忠

14:30 - 14:42	<b>GS06-013</b> 2025 年 ML 6.4 大埔地震之破裂機制探討 <b>饒瑞鈞、吳澄峰、陳英琪</b>
14:42 - 14:54	<b>GS06-014</b> 2025 年大埔地震序列之高解析重定位與震源機制探討：密集地震陣列的應用與成果

	賴佳男、溫士忠、劉祐安、蘇建旻、溫怡瑛、廖勿渝、李恩瑞、黃有志、陳映年
14:54 - 15:06	<b>GS06-015</b> Source rupture model analysis of the 2025 Dapu earthquake, Taiwan <b>Shiann-Jong Lee, Ting-Yu Liu, Tzu-Chi Lin</b>
15:06 - 15:18	<b>GS06-016</b> Applying a Weighted Template-Matching Algorithm (WTMA) to Investigate the Seismogenic Structures and Microseismic Activity of the 2025 ML6.4 Dapu Earthquake Sequence in Taiwan <b>En-Jui Lee, Wu-Yu Liao, Po Chen, Ruey-Juin Rau, Yuan-Hsi Lee, Strong Wen, Kuo-En Ching, Da-Yi Chen, Wen-Tzong Liang</b>
15:18 - 15:30	<b>GS06-017</b> Finite Fault Solutions of the 2025 ML 6.4 Dapu Earthquake and Its Aftershock Spatiotemporal Distribution <b>Po-Fei Chen, Yopi Serhalawan, Mei Chien, Wei-Li Chen</b>
15:30 - 15:42	<b>GS06-018</b> 2025 年 Mw 6.1 大埔地震是否與 1964 年 Mw 6.4–6.9 白河地震破裂區重疊？對台灣西南部地震潛勢之啟示 <b>吳瑋哲、王珮綸、饒瑞鈞</b>
15:54 - 16:06	<b>GS06-019</b> 利用經驗格林函數法探討 2025 大埔地震之強地動特性 <b>蘇建旻、溫怡瑛、陳俊德</b>
16:06 - 16:18	<b>GS06-020</b> 基於深度學習地震目錄揭露 2025 年台灣西部大埔地震序列之發震構造 <b>廖勿渝、李恩瑞、饒瑞鈞、陳達毅、溫士忠、景國恩、梁文宗</b>
16:18 - 16:30	<b>GS06-021</b> Near-real-time assessment of the ML6.4 Dapu earthquake-induced landslides <b>Che-Ming Yang, Wei-An Chao</b>
16:30 - 16:42	<b>GS06-022</b> Changes in the activity of the Hsiaogunshui mud volcano, southwestern Taiwan, during and after the 2025/01/21 Dapu earthquake <b>Maryline Le Beon, Agnes Helmstetter, Erwan Pathier, Strong Wen, Laurent Metral, Yen-Hsiang Gao, Kai-Feng Chen, Ngoc-Thao Nguyen, Chia-Nan Lai, Jean Vandemeulebrouck</b>
16:42 - 16:54	<b>GS06-023</b> 利用 SeisComP 軟體建置新一代地震測報系統—以 2025 大埔地震為例 <b>宋冠毅、陳達毅、吳逸民</b>

**GS07**

**Room 402b**

**[GS-M3] 光纖感測技術於地質災害、能源開發與環境監測的新進展**

## Advances in Distributed Acoustic Sensing Technology for Geological Hazards, Energy Development, and Environmental Monitoring

主持人：黃信樺、鐘志忠

08:50 - 09:02	<b>GS07-001</b> Advancing Deep-Seated Landslide Monitoring Using Borehole Distributed Acoustic Sensing Technology <b>Hsin-Hua Huang, Yi-Sheng Huang, Kuo-Lung Wang, Ya-Ju Hsu, Chih-Chung Chung, Chin-Jen Lin, Chin-Shang Ku, Hsi-An Chen</b>
09:02 - 09:14	<b>GS07-002</b> BOTDR 光纖監測技術應用於剪切帶變形之頻移-剪切位移轉換研究 <b>鐘志忠、傅東璋</b>
09:14 - 09:26	<b>GS07-003</b> First Observation of a Lightning-Induced Isotropic Microseismic Event at Depth: Evidence from the MiDAS Seismic Monitoring System, Taiwan <b>Yen-Yu Lin, Hsin-Hua Huang, Ming-Che Hsieh, Li-Wei Kuo, Chien-Chih Chen, Min-Hsuan Chang, Tze Yuan Chen, Hsi-An Chen</b>
09:26 - 09:38	<b>GS07-004</b> Thermal Characteristics of the Milun Fault Using Borehole Optical Fiber Sensing <b>Hsuan-Ting Lai, Kuo-Fong Ma, Yen-Yu Lin</b>
09:38 - 09:50	<b>GS07-005</b> Illuminating Earthquake Sources with Borehole Fiber Optics: Insights from the 2022 ML6.8 Chihshang, Taiwan, Earthquake <b>Jolan Liao, Yen-Yu Lin, Kuo-Fong Ma</b>
09:50 - 10:02	<b>GS07-006</b> River sediment observatory in the mountainous catchment: Long-term and high spatiotemporal monitoring with distributed acoustic sensing (DAS), large-N geophone array, hydrophone, smart rock, AI-based grain-size scanner, and photogrammetric survey <b>Wei-An Chao, Chi-Yao Hung, Yu-Shiu Chen, Hsin-Hua Huang, Chin-Shang Ku, Che-Lun Yang, Jui-Jen Lin</b>
10:14 - 10:26	<b>GS07-007</b> Extending the Reach of Marine Geophysics: Nearshore Ocean Monitoring and Active Source Applications with Distributed Acoustic Sensing <b>Justin Yen-Ting Ko, Kun-Chi Ho, En-Shih Wu, Chun-Hung Lin, Ho Kuo-Chen, Zhuo-Kang Guan, Yao Hsu, Hsi-An Chen, Hsin-Hua Huang, Ho-Han Hsu, Chen-Fen Huang</b>
10:26 - 10:38	<b>GS07-008</b> Construction of Horizontal Strain Array from DAS sensor <b>Chin-Jen Lin, Kuo-Fong Ma, Hsin-Hua Huang, Chin-Shang Ku</b>

10:38 - 10:50	<b>GS07-009</b> 結合離散式升學感測與多通道表面波分析技術之初探 <b>楊倡碩、鐘志忠、李瑞庭</b>
10:50 - 11:02	<b>GS07-010</b> 應用分布式光纖感測技術於鐵路路基成像 <b>劉家維、陳榮輝</b>
11:02 - 11:14	<b>GS07-011</b> 應用分散式光纖溫度感測技術監測森林環境中風速與太陽輻射之空間分布 <b>李逸帆、中井太郎、林博雄、林欽仁、賴彥任、馬國鳳</b>
11:14 - 11:26	<b>GS07-012</b> Cloud Velocity Observed by Using an All-Sky Camera at Longyearbyen <b>Jann-Yenq Liu, Jheng-Syun Chao</b>

**GS07**

**Room 402b**

## [GS-EG] 水文與工程地質學 Hydrogeology and Engineering Geology

主持人：羅百喬

14:30 - 14:42	<b>GS07-013</b> 首幅台灣渺子成像術密度影像 - 桃園石門水庫 ( $24^{\circ}49'27.5''N$ , $121^{\circ}17'9.8''E$ ) <b>陳建志、鄭凱聿、林志勳、蕭宇翔、彭家城、謝雁羽、蔡子翔、郭家銘、林祐生</b>
14:42 - 14:54	<b>GS07-014</b> 從臺灣東部交通路廊探討三維地質模型建構之策略與應用 <b>邱家宏、黃宥傑、黃詠智、王泰典、李佳翰、孫荔珍</b>
14:54 - 15:06	<b>GS07-015</b> 山腳斷層滑移風險評估及地下孔隙壓力擴散模擬 <b>李健豪、吳泓昱</b>
15:06 - 15:18	<b>GS07-016</b> 量化工程地質模型不確定性對邊坡穩定分析之影響 <b>黃詠智、邱家宏、王泰典、鄭富書</b>
15:18 - 15:30	<b>GS07-017</b> 坡趾受河道下切與加積影響邊坡變形模擬探討 <b>羅百喬、黃宥傑、蔡承翰、王泰典</b>
15:30 - 15:42	<b>GS07-018</b> 測繪孿生結合數值模型精進山岳隧道施工監測探討 <b>林樟元、王泰典</b>
15:42 - 16:06	<b>GS07-019</b> 隧道結構行為之水力互制分析

	施冠宇、王泰典、邱雅筑
16:06 - 16:18	<b>GS07-020</b> 東部地區之土壤層性質與水力特性初探 <b>郭品秀、沈如妍、劉慶怡、張原銘、彭國瑛、陳耐錦、莊伯禹、柯建仲</b>
16:18 - 16:30	<b>GS07-021</b> 考慮隧道開挖對裂隙岩體滲透特性影響之近場水流模擬 <b>張晟祐、邱雅筑、王泰典</b>
16:30 - 16:42	<b>GS07-022</b> Eruption of a CO <sub>2</sub> -driven Cold-Water Geyser, Crystal Geyser in Utah <b>Weon Shik Han</b>
16:42 - 16:54	<b>GS07-023</b> Water cycle and groundwater budget of Jeju Island <b>Kyoochul Ha</b>

**GS08**

**Room 402c**

## [GS-V4] 地殼與地函的岩石圈構造交互作用

### Lithotectonic Interaction between Crust and Mantle

主持人：葉孟宛

08:38 - 08:50	<b>GS08-001</b> Geochemistry and geochronology of middle Paleozoic-early Mesozoic granite in the southern Truong Son terrane, central Vietnam <b>Chi Thi Pham, Jonh Gregory Shellnutt, Hao-Yang Lee, Anh The Bui</b>
08:50 - 09:02	<b>GS08-002</b> Geochemistry of Mesoproterozoic dyke swarms of the Southern and Superior provinces, Canadian Shield <b>Wei-Yu Chen, John Gregory Shellnutt</b>
09:02 - 09:14	<b>GS08-003</b> Phase equilibria modelling of basaltic rocks from the Vesuvian surface: Implications for the silicic melt generation <b>Sam Uthup, John Gregory Shellnutt</b>
09:14 - 09:26	<b>GS08-004</b> Preliminary field, geochemical, and geochronological results from the Korba granites, Central Indian Tectonic Zone <b>BorJie Hsieh, Gregory John Shellnutt, K. R. Hari, Neeraj Vishwakarma, Srinivas Deshmukh</b>
09:26 - 09:38	<b>GS08-005</b> Tectonic Significance of Ultra-Slowly Uplifted Seychelles Granites: Insights from Argon Geochronology <b>Meng wan Yeh, Chi Pham, Gregory J. Shellnutt, Manu M.P. Prasanth</b>
09:38 - 09:50	<b>GS08-006</b>

印尼西爪哇東部火成岩的地球化學與年代學

呂宛馨、賴昱銘、鍾孫霖、**Setiawan Iwan**、李皓揚

09:50 - 10:02 **GS08-007**

臺灣新竹馬武督的鋯石巨晶：U-Pb 地質年代學、原位 Hf-O 同位素特徵  
及其地質意義

董國安、蔣正興、林郁伶、黃克峻、楊懷仁、李皓揚、李獻華

**GS08**

**Room 402c**

## [GS-V1] 一般地球化學

### General Geochemistry

主持人：劉怡偉

10:14 - 10:26 **GS08-008**

Assessing adaptive abilities of the orange coral *Tubastraea aurea* to ocean acidification using geochemical proxies

**Yi-Wei Liu, Gowri Krishna Girija, Jiang-Shiou Hwang**

10:26 - 10:38 **GS08-009**

Decoding Sedimentary Pyrite Records Through In-Situ Sulfur Isotope Analysis  
**Liu Yung-Hsin, Lee Der-Chuen, Liang Mao-Chang, Iizuka Yoshiyuki, Thiemens H. Mark, Shen Yanan**

10:38 - 10:50 **GS08-010**

Spinel and phosphate mineral chemistry as potential markers for the formation of the Southampton Pallasite

**Alessia Riccardo, J. Gregory Shellnutt, Yoshiyuki Iizuka**

10:50 - 11:02 **GS08-011**

Trigger and Mechanism for the Late Ordovician Glaciation and Mass Extinction  
**Kuo-Fang Huang, Yung-Hsin Liu, Ai-Lin Chen, Hong-Yi Chen, Yanan Shen**

**GS08**

**Room 402c**

## [GS-V3] 環境地球化學

### Environmental Geochemistry

主持人：劉怡偉

11:02 - 11:14 **GS08-012**

Applying Triple Oxygen Isotopes of Nitrate to Quantify Gross Nitrification Rates in an Oligotrophic, Freshwater Environment

**Han Chen, Fumiko Nakagawa, Urumu Tsunogai**

**GS09**

**Room 403**

## [GS-TT2] 臺灣之地質構造與環境變遷

### Geological Structure and Environmental Change in Taiwan

主持人：葉恩肇

08:38 - 08:50	<b>GS09-001</b> 古近紀鄰近臺灣區域的岩漿活動年代為何? <b>陳文山、洪嘉佳、邵文佑、鍾孫霖</b>
08:50 - 09:02	<b>GS09-002</b> Comparison of Cenozoic Rift-Drift Transitions in the Northern Taiwan Hsuehshan Trough and Southern East China Sea Shelf Basin: Insights from Detrital Zircon Analysis <b>Tung-Yi Lee, Chun-Chi Chen, Yu-Ling Lin, Mei-Cheng Lai</b>
09:02 - 09:14	<b>GS09-003</b> Shear Velocity Structures Related to Arc-Continental Collision and Ancient Rift Events beneath Southern Taiwan Revealed by Rayleigh Wave Tomography <b>Hsiu-Cheng Yeh, Pei-Ying Patty Lin, Hsin-Ying Yang, Tai-Lin Tseng, Chih-Ming Lin, Shu-Huei Hung, Eh Tan, Chau-Ron Wu</b>
09:14 - 09:26	<b>GS09-004</b> Structural history and kinematic evolution during exhumation processes in the eastern Central Range, Taiwan <b>Yeh En-Chao, Cheng Yu-Shi, Li Yu-Ho, Chen Huei-Fen, Chen Chih-Tung, Chen Ping-Chuan, Tseng Ya-Chu, Hui Ning-Shan, Chang Yu-Ching, Lien Jui-Yu</b>
09:26 - 09:38	<b>GS09-005</b> Thermo-Tectonic Evolution of the Taiwan Slate Belt: New Constraints from High-Resolution LiDAR 3D Structural Mapping <b>Yun-Pin Chen, Yu-Chang Chan, Yu Wang, Wan-Ting Wei</b>

**GS09**

**Room 403**

**[GS-GM] 地形學/地質景觀**  
**Geomorphology / Geological Landscape**

主持人：葉恩肇

09:38 - 09:50	<b>GS09-006</b> Assessment of Active Tectonics Using Geomorphic Indices in the Badlands of Southwestern Taiwan <b>Kifayat Ali, Maryline Le Béon, Lionel Siame, Kai Feng Chen, Ngoc Thao Nguyen, Kuo En Ching, Erwan Pathier</b>
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**GS09**

**Room 403**

**[GS-TT2] 臺灣之地質構造與環境變遷**  
**Geological Structure and Environmental Change in Taiwan**

主持人：葉恩肇

09:50 - 10:02	<b>GS09-007</b>
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利用光達三維數值地形模型精進西部麓山帶及雪山山脈地質區交界附近  
之構造幾何：以桃園地質圖幅為例  
魏婉庭、詹瑜璋、葉恩肇、陳允平

GS09

Room 403

## [GDGS-EO] 測地學與活動地殼變形/遙感探測技術

### Geodesy and Crustal Deformation / Remote Sensing

主持人：譚謨、徐乙君

10:14 - 10:26 GS09-008

利用荷重-克來勞方程式估計 LLVP 造成之 CMB 非自轉扁率

王祐翔、趙丰

GS09

Room 403

## [GS-TT1] 地震地質與新期構造

### Earthquake Geology and Neotectonics

主持人：譚謨、徐乙君

10:26 - 10:38 GS09-009

Intraslab stress heterogeneity and continental lithospheric mantle rheology revealed by the earthquake doublet in Northern Manila subduction zone

Wan-Lin Hu, Eh Tan, Ryo Okuwaki, Yuji Yagi

10:38 - 10:50 GS09-010

臺灣弧前基盤缺失的熱-機械力學耦合數值模型

陳致信、譚謨、李元希、洪淑蕙

10:50 - 11:02 GS09-011

Structural Evolution of the Eastern Taiwan Collision Zone: Insights from 2D Thermo-Mechanical Simulations

Tan Eh, Yuan-Hsi Lee, Chi-Hsin Chen, Shu-Huei Hung

11:02 - 11:14 GS09-012

Lithological and structural controls on surface deformation in the mudstone-rich fold-and-thrust belt of southwestern Taiwan: A perspective from numerical experiments

Wan-Lin Hu, Tan Eh

GS09

Room 403

## [GDGS-EO] 測地學與活動地殼變形/遙感探測技術

### Geodesy and Crustal Deformation / Remote Sensing

主持人：譚謨、徐乙君

11:14 - 11:26 GS09-013

Tectonic Deformation and Backthrust Fault Development Along the Chelungpu Fault: Insights from PSInSAR Analysis  
**Hsu Yi-Chun, Chang Chung-Pai, Yen Jiun-Yee, Wang Chun-Chin, Lu Chih-Heng, Shih Nai-Wun, Huang Shao-Yi, Kuo Yu-Ting, Yen I-Chin**

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11:26 - 11:38 **GS09-014**

恆春半島內陸斷層之觸發型慢滑移事件：大地測量資料與地震序列模擬之整合分析  
蕭詩涵、景國恩、安藤亮輔、張文和、張午龍、陳建良

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**GS09**

**Room 403**

**[GS-TT1] 地震地質與新期構造**  
**Earthquake Geology and Neotectonics**

主持人：譚謨、徐乙君

11:38 - 11:50 **GS09-015**

池上斷層傾角統計與分析結果  
陳冠宇

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11:50 - 12:02 **GS09-016**

透過量化臺灣不同區域的海平面變化以修正海岸構造抬升量之估計  
何安、徐灝德、譚謨、Ken L. Ferrier

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**GS09**

**Room 403**

**[GS-ST1] 地層與古生物研究**  
**Stratigraphy and Paleontology**

主持人：林日白、林千翔

13:30 - 13:42 **GS09-017**

「早坂犀牛」之名字使用論析  
紀子勤、楊富鈞

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13:42 - 13:54 **GS09-018**

A New *Deinotherium levius* (Deinotheriidae, Proboscidea) Finding from Thrace, Türkiye: Implications for Anatolian Paleobiogeography  
Halaçlar Kazım, Mayda Serdar

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13:54 - 14:06 **GS09-019**

An Investigation into The Relationship between Avian Bone Structure and Flight Ability  
**Ci-Hong Ciou, Tzu-Ruei Yang, Cheng-Te Yao, Shiao-Yu Hong, Bi-Qing Liang, Chun-Chieh Wang**

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14:06 - 14:18 **GS09-020**

蛋殼力學反映已滅絕鳥類與非鳥類恐龍多樣的生殖策略  
吳筱柔、顏安、于宏燦、莊嘉揚、楊子睿

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14:18 - 14:30	<b>GS09-021</b> MYSTERY OF THE KUTCH TERRANE, BIOGEOGRAPHIC EVIDENCE FROM THE MIOCENE SAND DOLLARS <b>Ammu Sankar Senan, Jih-Pai Lin, Rajeev Patnaik</b>
14:30 - 14:42	<b>GS09-022</b> A new Miocene marine fish assemblage from the Penghu Archipelago, Taiwan <b>Lin Chien-Hsiang</b>
14:42 - 14:54	<b>GS09-023</b> Additional Sharks and batoids (Chondrichthyes, Elasmobranchii) from the Middle Miocene Gaj Formation, Bhavnagar Gujarat and late Miocene Baripada Beds, Odisha, India: A discussion paleobiogeography <b>Kongrailatpam Milankumar Sharma, Asgar Hossain, Parthasarathi Biswal, Tusar Ranjan Mohanty, Rajeev Patnaik</b>
14:54 - 15:06	<b>GS09-024</b> Elasmobranch assemblage of the Lower Pleistocene Cholan Formation, northern Taiwan <b>Yufong Chen, Ming-Tsung Chung, Chien-Hsiang Lin</b>
15:18 - 15:30	<b>GS09-025</b> Dominant myctophid otoliths indicate late Miocene coastal upwelling in Panama <b>Lin Chien-Hsiang, O'Dea Aaron</b>
15:30 - 15:42	<b>GS09-026</b> Unraveling the evolution of Sciaenidae (Perciformes): a window into Cenozoic marine diversity and paleogeography <b>Wu Siao-Man, Lin Chien-Hsiang</b>
15:42 - 15:54	<b>GS09-027</b> 上新統-更新統地層界線對比再研究 <b>TANYISHENG, LINJIHPAI</b>
15:54 - 16:06	<b>GS09-028</b> 大屯火山地質製圖原則探討 <b>洪國騰、林啓文、陳致言、陸挽中、李柏村、尤琇琳</b>
16:06 - 16:18	<b>GS09-029</b> 台灣甲仙鹽水坑頁岩冷泉碳酸鹽岩中新發現之海蛤蝦 <b>簡一德、彭紹宏、梁碧清、李世緯</b>
16:18 - 16:30	<b>GS09-030</b> 臺南玉井地質調查-鏡面砂岩的層位探討 <b>莊釗鳴、周稟珊、劉彥求、林殿順</b>
16:30 - 16:42	<b>GS09-031</b> 臺灣海膽化石生物帶與南港層區域地層對比初探 <b>林日白</b>

# 6月18日議程 June 18<sup>th</sup> Sessions

[GS] 2025 中華民國地球物理學會及中華民國地質學會年會暨學術研討會  
2025 Annual Conference of Chinese Taipei Geophysical Society &  
Geological Society Located in Taipei

## 會員大會

Room 402

12:00 - 13:00 地物學會會員大會

## 特別講座

13:00 - 14:00 2025【產業專業應用技術講座】

主持人：王士榮

Room 402

石油基金推動產學合作交流會

15:54 - 16:54 主持人：石油基金油氣探勘開發及技術研發計畫管理

辦公室

Room 402b

## GS10

Room 402a

### [GS-GC1] 全球變遷

#### Global Change

主持人：潘惠娟

09:42 - 09:54 GS10-001

Detectability of transboundary air pollution pathway variations associated with climate change using anthropogenic aerosols

**Cai Ying, Irie Hitoshi, Damiani Alessandro, Itahashi Syuichi, Takemura Toshihiko, Khatri Pradeep, Michibata Takuro**

09:54 - 10:06 GS10-002

Regional disparities and the role of long-range transport in global wet nitrogen deposition

**Mohinuddin Sekh, Jr-Chuan Huang, Yi Ying Chen**

10:06 - 10:18 GS10-003

The surface hydrological climate changes in the East China Sea over the past 2000 years based on organic biomarker temperature proxies

**Ting-Hsuan Hsu, Min-Te Chen, Hui-Juan Pan**

10:18 - 10:30 GS10-004

生物炭的環境穩定性有利於增匯減排對碳封存及氣候變遷有積極影響

**陳婧、梁碧清、劉振霖**

10:30 - 10:42 GS10-005

Mangrove Root Microbiomes Respond to Microplastic Stress with Functional Plastic Degradation Potential

		<b>Chin-Wen Wang, Chien-Yen Chen, Gobinda Dey, Raju Kumar Sharma, Pin-Yun Lin, Md. Taharia, Shafiqqa Ali, Max James Fulgence</b>
10:42 - 10:54	<b>GS10-006</b>	Unraveling Heavy Metal Contamination in Mangrove Ecosystem: Risk Assessment, Phytoremediation Potential, and Rhizospheric Microbial Roles <b>Gobinda Dey, Raju kumar Sharma, Pin Yun Lin, Chin Wen Wang, Md Taharia, Shafiqqa Ali, Max James Fulgence, Chien Yen Chen</b>
10:54 - 11:06	<b>GS10-007</b>	Unraveling the Climate and Human Impact on Surface and Subsurface Runoff Elasticity in Diverse Ethiopian Sub-basins <b>Girum Getachew Demeke, Jr-Chuan Huang, Yi-Ying Chen</b>
	<b>GS10</b>	<b>Room 402a</b>
	<b>[GS-GC2] 氣候變遷下的海陸交互作用觀測</b>	
	<b>Observations of Land-Sea Interactions under Climate Change</b>	
	主持人：潘惠娟	
11:06 - 11:18	<b>GS10-008</b>	Moist Static Energy Budget and Madden-Julian Oscillation- Induced Extreme Precipitation: Land–Ocean Contrast in the Maritime Continent <b>Adelina Lumbangaol, Jia-Yuh Yu</b>
	<b>GS10</b>	<b>Room 402a</b>
	<b>[GS-GP2] 工程與環境地球物理暨追思楊潔豪教授紀念專題</b>	
	<b>Engineering and Environmental Geophysics and Memorial Symposium for Prof. Yang</b>	
	主持人：王子賓	
14:30 - 14:42	<b>GS10-009</b>	地電阻影像法應用於地下水污染場址之回顧與展望 <b>王子賓</b>
14:42 - 14:54	<b>GS10-010</b>	地球物理探勘在臺灣土壤地下水污染調查整治之實務精進應用 <b>董天行、王子賓</b>
14:54 - 15:06	<b>GS10-011</b>	透地雷達應用於道路坍塌之案例探討 <b>陳宜傑、劉興昌、董天行</b>
15:06 - 15:18	<b>GS10-012</b>	運用透地雷達法於陽明山大屯池滲漏之探測與修補後之監測 <b>游峻一、李銘哲、顏一勤、葛岳淵</b>
15:18 - 15:30	<b>GS10-013</b>	CO <sub>2</sub> 地質封存監測技術生命週期整合應用評估

**GS10**

**Room 402a**

**[GS-S3] 環境與噪聲地震學**

**Environmental and Ambient Noise Seismology**

主持人：陳映年

15:42 - 15:54 **GS10-013**

On the Accuracy of Traveltime Measurements in Noise Interferometry: A New Approach Using Higher-Order Cross-Correlation within a Plane Wave Framework

**Ying-Nien Chen**

15:54 - 16:06 **GS10-014**

Source Characterization of Microseismic Noise in the middle of the Pacific Ocean using NoMelt Ocean Bottom Seismometer Experiment

**LALIT ARYA, SHU HUEI HUNG**

16:06 - 16:18 **GS10-015**

Infragravity Wave Observations in the Pacific Ocean Using Multiple Ocean-Bottom-Seismometer Arrays

**Chen Kai-Xun, gung Yuancheng**

16:18 - 16:30 **GS10-016**

Ambient-noise tomography of northern Ryukyu constrained by OBS data and the development of the Okinawa Trough

**Ban-Yuan Kuo, Kai-Xun Chen, Shu-Chuan Lin**

16:30 - 16:42 **GS10-017**

Unraveling Geological Complexity in Southern Taiwan Through Eikonal Tomography and Dense Seismic Arrays

**Chun-Fu Liao, Ying-Nien Chen, Yuancheng Gung**

**GS11**

**Room 402b**

**[GS-EM2] 礦物及岩石物理**

**Mineral and Petro-Physics**

主持人：龔慧貞

10:18 - 10:30 **GS11-001**

以高壓鑽石砧及雷射加熱精準量測地核鐵鎳矽合金的熱傳導率

**陳朝志、張仁韋、曹懿麒、謝文斌**

10:30 - 10:42 **GS11-002**

Thermal Conductivity of Iron Under High Pressure and Temperature: Implications for Mercury's Core and Dynamo Evolution

**Yi-Ting Chiang, Wen-Pin Hsieh, Yi-Chi Tsao, Chao-Chih Chen, Jun-Wei Chang**

10:42 - 10:54	<b>GS11-003</b>	Reduced thermal conductivity of hydrous aluminous silica and calcium ferrite-type phase promote water transportation to Earth's deep mantle <b>Wen-Pin Hsieh, Frédéric Deschamps, Yi-Chi Tsao, Jen-Wei Chang</b>
10:54 - 11:06	<b>GS11-004</b>	石榴子石對於地球內部熱演化之影響 <b>吳玥箖、謝文斌</b>
11:06 - 11:18	<b>GS11-005</b>	單晶 $\text{CaSnO}_3$ 彈性模量之決定：整合布里淵散射與 DFT 模擬 <b>龔慧貞、花天享、Wenhao Su</b>

## GS11

Room 402b

### [GS-EM1] 磯物及岩石學

#### Mineralogy and Petrology

主持人：黃克峻

14:30 - 14:42	<b>GS11-006</b>	金瓜石硫砷銅礦、呂宋礦和黃鐵礦金 - 銀碲化物和銅 - 銻硫化物包裹體之電子顯微組織與可能生成機制 <b>莊祐濬、江威德</b>
14:42 - 14:54	<b>GS11-007</b>	Microtextures of Bi-Au melt inclusions and droplets in pyrrhotite-dominant chimney fragments from the Geolin Mounds hydrothermal field offshore NE Taiwan: Implications for gold scavenging by bismuth melts in hydrothermal systems <b>Ko-Chun Huang, Wei-Teh Jiang</b>
14:54 - 15:06	<b>GS11-008</b>	金屬奈米顆粒的局域表面電漿共振效應：奈米尺度礦物著色新機制的表徵、模擬與再現 <b>吳琮王、宋聖榮、陳文山、林文、曾紹欽</b>
15:06 - 15:18	<b>GS11-009</b>	同步輻射奈米顯微術在發光礦物的譜學研究 <b>吳琮王、宋聖榮、陳文山、林文、林碧軒</b>
15:18 - 15:30	<b>GS11-010</b>	臺灣中部橫貫公路變質泥岩磁黃鐵礦顯微組織對其生成及轉變之啟示 <b>吳怡萱、江威德</b>
15:30 - 15:42	<b>GS11-011</b>	關仔嶺地區不同流體對邊坡穩定之影響 <b>許嘉珍、陳燕華</b>

**GS12****Room 402c****[GS-S2] 工程地震學  
Engineering Seismology**

主持人：郭俊翔、林哲民

09:42 - 09:54	<b>GS12-001</b> A New Empirical Probability Model for Surface Faulting Utilizing Width-Rupture Ratio for Crustal Earthquakes <b>Jyun-Yan Huang, Norman A Abrahamson</b>
09:54 - 10:06	<b>GS12-002</b> Development of an Ergodic Ground Motion Model for Estimating 5% Damped Spectral Acceleration in Northern Vietnam <b>Bang Van Phung, Hsiang Chun Kuo, Shouh Bor Huang, Nghia Cong Nguyen, Long Vinh Ha</b>
10:06 - 10:18	<b>GS12-003</b> Probabilistic seismic hazard assessment for Taiwan: TEM PSHA2025 <b>Jia CianGao</b>
10:18 - 10:30	<b>GS12-004</b> 地表斷層錯動量觀測與評估間之合宜性探討 <b>王允佑、張毓文、劉勛仁、范秋屏</b>
10:30 - 10:42	<b>GS12-005</b> MiDAS Vertical Arrays – Investigation and Observation <b>Kuo Chun-Hsiang, Chang Yuan-Huan, Lin Yen-Yu</b>
10:42 - 10:54	<b>GS12-006</b> 動力分析用垂直向輸入地震歷時挑選之探討 <b>劉勛仁、張毓文</b>
10:54 - 11:06	<b>GS12-007</b> 臺南台地高樓層建物頻譜反應與震動模式之探討 <b>葉宥霆、吳泓昱、姚昭智</b>
11:06 - 11:18	<b>GS12-008</b> 2024 年 0403 花蓮地震序列於東華大學井下地震儀觀測到之場址特性與非線性反應 <b>林哲民、郭俊翔、謝宏灝、王允佑、黃雋彥、張文彥</b>

**GS12****Room 402c****[GS-S1] 一般地震學研究  
General Seismology**

主持人：曾泰琳

14:30 - 14:42	<b>GS12-009</b>
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An annual report of Real-Time Moment Tensor Monitoring System

**Ting-Yu Liu, Shiann-Jong Lee**

14:42 - 14:54	<b>GS12-010</b>
	Adjoint Tomography of Taiwan: Enhanced Seismic Imaging through Full-waveform Inversion
	<b>Hung-Yu Yen, Hsin-Hua Huang</b>
14:54 - 15:06	<b>GS12-011</b>
	Rayleigh wave phase velocity maps in Eastern Indonesia
	<b>Puji Ariyanto, Kai Xun Chen, Frédéric Deschamps, Ban Yuan Kuo, Maryline Le Béon</b>
15:06 - 15:18	<b>GS12-012</b>
	Stress inversion of focal mechanism solutions in the Philippine island arc using k-means clustering
	<b>John Emmanuel Sevilla Fungo, Ruey-Juin Rau</b>
15:18 - 15:30	<b>GS12-013</b>
	利用歷史地震探討臺灣的孕震構造-臺灣地震帶專書發表
	<b>楊清淵、柯明淳、陳文山、吳逸民、楊耿明、洪嘉佳、葉柏逸、柯孝勳</b>
15:30 - 15:42	<b>GS12-014</b>
	Employing Bayes' Theorem to Estimate the Effect of Precursor: a Case Study of Japanese Folklore linking Deep-Sea Fish Appearance with Earthquakes
	<b>Ting-Chung Huang, Yih-Min Wu</b>
15:42 - 15:54	<b>GS12-015</b>
	從觀測到預警：以震度分布、強度與持續時間訓練生成式 AI 預警模型
	<b>陳達毅</b>

**GS13**

**Room 403**

**[GS-V6] 從火山噴發到地熱開發：大屯火山活動的時空演變特徵、潛能與風險**

**From Volcanic Eruption to Geothermal Development: Spatiotemporal Evolution Characteristics, Potential and Risks of Tatum Volcanic Activity**

主持人：賴昱銘、盧乙嘉

08:54 - 09:18	<b>GS13-001</b>
	Characteristics of Acid Hydrothermal Alteration in the Northeastern Part of Tatum Volcano Group
	<b>Sachihiro Taguchi, Mizuki Fujisaki, Fura Takemoto, Kentaro Abe, Hitoshi Chiba, Yi-Chia Lu, Ting-Jui Song, Yu-Jie Lin, Sheng-Rong Song, Kotaro Yonezu, Koichiro Watanabe, Po-Tsun Li, Chi-Hsuan Chen, Jiin-Fa Lee</b>
09:18 - 09:30	<b>GS13-002</b>
	Reconstructing geothermal geological models by combining geophysical, geochemical and geological studies in Tatum volcanoes area, Northern Taiwan

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	Jian-Cheng Lee, Chien-Chih Chen, Hildeaki Hase, Cheng-Horng Lin, Hsin-Hua Huang, Sheng-Rong Song, Yi-Chia Lu, En-Chao Yeh, Li-Wei Kuo, Chung-Hsiang Mu, Gong-Ruei Ho, Sze-Ting Kuo, Yue-Gau Chen
09:30 - 09:42	<b>GS13-003</b> 大屯山高溫中性流體酸化探討 <b>盧乙嘉、宋庭瑞、劉家均、梁玉欣、朱蓉瑄、宋聖榮</b>
09:42 - 09:54	<b>GS13-004</b> 大屯山馬槽井(CGS-MT-01)溫度剖面研究 <b>朱正文、盧乙嘉、沈建豪、李沅銘、江俞萱、梁閎森</b>
09:54 - 10:06	<b>GS13-005</b> 大屯火山地下速度構造的時空間變化 <b>蒲新杰、林正洪、賴雅娟、史旻弘、李曉芬</b>
10:06 - 10:18	<b>GS13-006</b> 大屯火山群的長期地球化學監測：來自連續土壤氣體、火山噴氣與溫泉觀測的解析 <b>李曉芬、賴雅娟、林正洪、史旻宏、洪國騰</b>
10:30 - 10:42	<b>GS13-007</b> Natural CO <sub>2</sub> diffuse degassing from the Tatun Volcano Group, Northern Taiwan <b>Ching-Chou Fu, Kuo-Hang Chen, Kuo-Wei Wu, Pei-Ling Wang, Li-Hung Lin, Vivek Walia</b>
10:42 - 10:54	<b>GS13-008</b> 大屯火山噴泥事件初探 <b>陳昇平、賴昱銘、林毓潔、李曉芬、蕭秀璟、凌韻雅、郭京達</b>
10:54 - 11:06	<b>GS13-009</b> Late quaternary eruption history of the Tatun Volcano Group (Taiwan) – new constraints from zircon double-dating and 40Ar/39Ar dating of lava flows in Mt. Shamao <b>Karl Dimarucut Jabagat, Yuan-Hsi Lee, Martin Danišík, Daniel Miggins, Mei-Fei Chu, Yu-Ming Lai, Yun-Chieh Lo, Po-Tsun Lee, Cheng-Horng Lin</b>
11:06 - 11:18	<b>GS13-010</b> 大屯火山群蒸氣噴發火山灰的井下及地表石英鑽同位素分析比對：驗證A2C模擬之風場結果 <b>林毓潔、賴昱銘、童譯、劉怡偉、宋聖榮</b>
11:18 - 11:30	<b>GS13-011</b> 大屯火山群火山地形之定量化探討 <b>郭京達、賴昱銘、Kerry Sieh</b>
11:30 - 11:42	<b>GS13-012</b> Eruptive histories of the Eastern Tatun Volcano Group, Taiwan, resolved by 40Ar-39Ar and zircon double-dating (ZDD) of lava flows

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**Julien Pi, Yuan-Hsi Lee, Karl Dimarucut Jabagat, Daniel Miggins, Martin Danišík, Mei-Fei Chu, Yu-Ming Lai, Yun-Chieh Lo, Po-Tsun Lee, Cheng-Horng Lin**

**GS13**

**Room 403**

**[GS-V2] 火山學**

**Volcanology**

主持人：賴昱銘、盧乙嘉

13:30 - 13:42 **GS13-013**

The Past Behavior of the Tatun Volcanic Group: Key to Its Future Behavior and Hazards

**Kerry Sieh**

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**GS13**

**Room 403**

**[GS-V6] 從火山噴發到地熱開發：大屯火山活動的時空演變特徵、潛能與風險**

**From Volcanic Eruption to Geothermal Development: Spatiotemporal Evolution Characteristics, Potential and Risks of Tatun Volcanic Activity**

主持人：賴昱銘、盧乙嘉

13:42 - 13:54 **GS13-014**

Evolution of the Songshan complex from geomorphological mapping, 40Ar-39Ar dating, petrology and geochemistry

**Shih-Jui Lin, Sheng-Yu Li, Kerry Sieh, Brian Jicha, Kwan-Nang Pang, Truong Tai Nguyen, Hao-Yang Lee, Yoshiyuki Iizuka**

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13:54 - 14:06 **GS13-015**

Unraveling eruptive history and magmatic evolution of the Huangzuei complex through 3D geomorphological mapping, 40Ar/39Ar dating and geochemistry

**WeiChe Li, Kerry Sieh, Yu Wang, Brian Jicha, Kwan-Nang Pang, Truong Tai Nguyen, Yu-Chang Chan**

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14:06 - 14:18 **GS13-016**

Thermobarometric Constraints on the Formation of Major Eruptive Phases of the Tatun Volcanic Group

**Tai Truong Nguyen, Kwan-Nang Pang, Kerry Sieh, Brian Jicha, Yu-Ming Lai, Wei-Che Li, Welson Sheng-Yu Li, Shrek Shih-Jui Lin, Huai-Yu Tang, Hao-Yang Lee, Yoshiyuki Iizuka**

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14:18 - 14:30 **GS13-017**

Volcanic history of Shamao complex: One of the youngest volcanic events in the late Pleistocene of Tatun Volcano Group, northern Taiwan.

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**GS14**

**Room 500**

## [GS-SG1] 文化資產保存中的地質科學

### Geosicence for Culture Heritage Conservation

主持人：林秋婷

09:06 - 09:18 **GS14-001**

銅質文物材質及其次生礦物的非破壞性檢測  
方建能

09:18 - 09:30 **GS14-002**

臺灣的岩礦標本之科學文化價值及保存  
黃克峻

09:30 - 09:42 **GS14-003**

臺灣本業敷瓦的文化資產價值及材料特性分析  
林秋婷、許勝發、謝以士、陳君榮

09:42 - 09:54 **GS14-004**

Racolyte：自行研發的礦物拉曼光譜比對系統  
黃旭毅、陳惠芬、黃怡陵、李毓和

09:54 - 10:06 **GS14-005**

營埔遺址石刀材質分析與產地推測-談新石器晚期大肚溪流域族群關係  
李作婷

10:06 - 10:18 **GS14-006**

結合文史田野調查再探 1935 年新竹台中大地震的致災因素及地震文化資產保存  
徐毅振

**GS14**

**Room 500**

## [GS-SG2] 地質保育：地質科學與社會參與的橋樑

### Geoconservation: a bridge between geoscience and social engagement

主持人：鍾令和、紀權窟

10:30 - 10:42 **GS14-007**

921 地震地質遺跡之監測與保存  
鍾令和、林楠勝、陳柏霖、Ivo Baroň、陳毅青、董家鈞

10:42 - 10:54 **GS14-008**

Taiwan Rock Guy: 用短片當作開啟認識台灣地質的一把鑰匙 // Taiwan Rock Guy: Using Short Form Content to Promote Taiwan's Geology  
James David Kelloway

10:54 - 11:06 **GS14-009**

大甲溪谷關段地質景觀與地熱資源之綜合評估-社會地質學與跨域協作的視角	
郭麗秋、陳柔妃、羅偉、尤琇琳	
11:06 - 11:18	<b>GS14-010</b> 北臺灣煤礦業文化路徑的推動與民眾參與之經驗 <b>周德清</b>
11:18 - 11:30	<b>GS14-011</b> 礦區的地質保育與社群參與：以礦山環境資源盤點計畫為例 <b>黃家俊</b>
11:30 - 11:42	<b>GS14-012</b> 掬一把海中的眼淚 - 轉化浮石障礙為天賜恩典 <b>張柏垣、曾美云、胡憲倫、余炳盛</b>
11:42 - 11:54	<b>GS14-013</b> 地質保育：地質科學與社會參與的橋樑 <b>紀權育、黃家俊</b>
13:30 - 13:42	<b>GS14-014</b> 岩石喚起的地方記憶：臺東市富岡社區的「在地創生」 <b>紀權育</b>
13:42 - 13:54	<b>GS14-015</b> 地質法配套之地質資料蒐集填報系統建構與數位治理探析 <b>鄭文昕、張閔翔、石同生</b>
13:54 - 14:06	<b>GS14-016</b> 自然律及法律觀點下的地質敏感區 <b>許晉璋、劉彥求、盧詩丁、林燕慧</b>
14:06 - 14:18	<b>GS14-017</b> 活動斷層地質敏感區基地地質調查及地質安全評估案例研析 <b>林燕慧、劉彥求、陳柏村</b>
14:18 - 14:30	<b>GS14-018</b> 活動斷層地質敏感區劃定現況與展望 <b>劉彥求、周稟珊、林燕慧</b>
14:30 - 14:42	<b>GS14-019</b> 活動斷層地質敏感區（F0026 利吉斷層）之劃設 <b>梁勝雄、劉彥求、陳盈璇、黃琨哲、王怡方、黃志遠、張筠、鄭智仁、林揚閔、邵昀霆、潘乙喬、林錫宏</b>
14:42 - 14:54	<b>GS14-020</b> 坡地的知識與風險：屏東來義鄉排灣族地景實踐與災害治理交織之探討 <b>Tjuku Ruljigaljig, 許銀安, 王凱倫, 歐伯恩</b>

**GS14**

**Room 500**

[GS-ST2] 第四紀地質學與考古地質學  
Quaternary Geology and Archaeogeology

主持人：汪良奇

15:18 - 15:30	<b>GS14-021</b> 以花粉紀錄重建的臺灣中部全新世環境史 <b>葉宛鑫、汪良奇</b>
15:30 - 15:42	<b>GS14-022</b> 結合多重沉積指標重建臺灣東北部山區全新世水文氣候變遷 <b>詹士霆、汪良奇、Ludvig Löwemark</b>
15:42 - 15:54	<b>GS14-023</b> 以姑仔崙山濕地多指標紀錄探討過去 1630 年來南臺灣氣候與環境變化 <b>李冠樺、汪良奇</b>
15:54 - 16:06	<b>GS14-024</b> 古代社會韌性與環境適應—以兩千年前的 Blihun 漢本遺址為例 <b>劉益昌、劉俊昱</b>

**GS15**

**Room 502**

## [GS-NH2] 地震災害/一般地質災害

### Seismic Hazard / General Geologic Hazard

主持人：詹忠翰、王昱

13:30 - 13:42	<b>GS15-001</b> Earthquake Damages: Controlling Factors and Hazard Assessment <b>Young-Seog KIM, Kwangmin JIN, Jin-Hyuk CHOI, Taehyeong KIM</b>
13:42 - 13:54	<b>GS15-002</b> Insights from the 2025 M7.7 Mandalay Earthquake and Their Application to Seismic Hazard Modeling <b>Chung-Han Chan, Yuan-Kai Chang, Myo Thant</b>
13:54 - 14:06	<b>GS15-003</b> Pseudo-dynamic Source Modeling with 1-Point and 2-Point Statistics of Earthquake Source Parameters for Physics-based Ground Motion Simulation <b>Seok Goo Song</b>
14:06 - 14:18	<b>GS15-004</b> Spatiotemporal distribution of seismicity and perturbation by moderate/large earthquakes in a tectonically active area and implications on seismic hazards mitigation: a case study in SW Taiwan <b>Hue Anh Mai, Jian-Cheng Lee, Chung-Han Chan</b>
14:18 - 14:30	<b>GS15-005</b> Rapid macroseismic assessment in the 2025 Mw 7.7 Sagaing earthquake using witness accounts from social media <b>Yu Wang, Eimhonenathar Myo</b>
14:30 - 14:42	<b>GS15-006</b> 顯著地震事件引致易液化土層孔隙水壓激發之初步研究

		<b>王金山、譚志豪、蘇泰維、邱禎龍、盧詩丁、陳勉銘</b>
14:54 - 15:06	<b>GS15-007</b>	臺灣西南部因泥體構造活動導致之複合式地質災害 <b>景國恩、陳松春、Ivo Baroň、饒瑞鈞、Yogendra Sharma</b>
15:06 - 15:18	<b>GS15-008</b>	利用微地動之方向性共振特徵分析臺灣西南部泥岩區之變形模式 <b>饒瑞鈞、吳澄峰、林廷宇</b>
15:18 - 15:30	<b>GS15-009</b>	恆春西台地泥貫入體特徵 <b>陳松春、景國恩、林燕初、林殿順</b>
15:30 - 15:42	<b>GS15-010</b>	Mapping the Mud Diatreme Range in the NKUST Region Using Microtremor Techniques <b>Jyun-Yan Huang, Che-Min Lin, Chun-Hsiang Kuo</b>
15:42 - 15:54	<b>GS15-011</b>	Micro-earthquakes Induce Fumarole CO <sub>2</sub> Emissions: A Case Study from Taiwan Tatun Volcano Group <b>Pallab Roy, Ching-Chou Fu, Mao-Chang Liang</b>
15:54 - 16:06	<b>GS15-012</b>	A Comprehensive Review of the Environmental and Hydrological Consequences of Large H.E.P Dam Projects in Taiwan <b>Max James Fulgence, Chien Yen Chen, Felix Mtalo, Gobinda Dey, Raju Kumar Sharma, Chin Wen Wang, Pin Yun Lin, Shafiqah Ali</b>

## GS16

Room 503

### [GS-ER] 地熱能源、碳封存與地質處置場址調查 Survey of Geothermal Energy, Carbon Storage, Geological Disposal Sites

主持人：丁禕、郭家瑋

13:30 - 13:42	<b>GS16-001</b>	台灣西北部二氧化碳封存潛能與長期行為之數值模擬研究 <b>郭家瑋、孔慶恩、楊昀蓁、郭婉如</b>
13:42 - 13:54	<b>GS16-002</b>	Path to SDGs: Cases in balancing geological resources and environmental protection <b>Chris Wang</b>
13:54 - 14:06	<b>GS16-003</b>	以台西盆地進行二氧化碳地質封存模擬之案例研究 <b>簡偉駿、邱一夫、吳禮浩、謝寬穎、施宇鴻</b>
14:06 - 14:18	<b>GS16-004</b>	非彈性應變回復法現地應力評估的統計分析與精進

	<b>蔡維倫、葉恩肇</b>
14:18 - 14:30	<b>GS16-005</b> 放射性核種於裂隙水流與母岩基質擴散之行為探討 <b>梁書嚴、李在平、沈如妍、莊柏禹、柯建仲</b>
14:30 - 14:42	<b>GS16-006</b> Applications of Modern Borehole Logging Technologies in Geothermal Reservoir Exploration <b>Hung-Yu Wu, Chen Wang, Bing-Yi Zhuang, Yuki Maehara</b>
14:42 - 14:54	<b>GS16-007</b> 以地表構造線型與裂隙活化趨勢探討臺中谷關地熱潛能 <b>劉品翔、葉恩肇、陳柔妃</b>
14:54 - 15:06	<b>GS16-008</b> 地熱儲集層數值模型初探-以臺東紅葉地區為例 <b>黃淞洋、林朝彥、Angus Yeh、John O'Sullivan、謝佩珊、董倫道、郭泰融、林錫宏、陳棋炫、鄭中歲</b>
15:18 - 15:30	<b>GS16-009</b> 沉積岩地熱場址地下溫度估算：以台南關子嶺溫泉為例 <b>鄭宇晴、張頌平、陳建志、葉冠甫、楊耿明、魏聲焜</b>
15:30 - 15:42	<b>GS16-010</b> 利用數值模擬建構並分析關子嶺地區地熱儲集層位態 <b>施松呈、吳泓昱</b>
15:42 - 15:54	<b>GS16-011</b> 臺東霧鹿地區地熱地質探勘 <b>謝佩珊、董倫道、Semih Zaman、黃淞洋、衣德成、郭泰融、溫心怡、林朝彥、張郁敬、錢正明、林錫宏、陳棋炫、鄭中歲</b>
15:54 - 16:06	<b>GS16-012</b> 地熱探勘階段地質調查作業項目實務探討 <b>丁樟、江協堂、許鈞傑、陸挽中、江品萱、林錫宏、陳勉銘</b>
16:06 - 16:18	<b>GS16-013</b> 地熱開發-地質調查與鑽探工程的協同作業與優化 <b>林義凱</b>
16:18 - 16:30	<b>GS16-014</b> 台灣國際地熱論壇對地熱能源政策的影響 <b>王守誠、李昭興、陳雪梨、許心瑀</b>