Understanding Key Parameters for Engineered Geothermal Development: Perspectives from Geophysics, Geochemistry, and Geology

INSTITUTE OF EARTH SCIENCES ACADEMIA SINICA
中央研究院地球科學研究所

Time：2026/02/23 (Mon.) 09:30-16:30

Location：2nd floor Lecture Hall, Institute of Earth Sciences, Academia Sinica

09:30-10:00	**Register**	
10:00-10:10	**Opening (Sun-Lin Chung, Director of IES)**	

Host: Li-Wei Kuo, Depertment of Earth Sciences, National Central University

10:10-10:40	Experimental studies on the seismic cycle in the presence of hot and pressurized fluids	Giulio Di Toro Department of Geosciences, University of Pavoda
10:40-11:10	Hydrothermal frictional properties of materials in subduction zones at low to high velocities: technical development and recent progress	Hanaya Okuda Japan Agency for Marine-Earth Science and Technology
11:10-11:40	Reconstructing geothermal geological models by combining geophysical, geochemical and geological studies in Tatun volcanoes area, Northern Taiwan	Jian-Cheng Lee Institute of Earth Sciences, Academia Sinica
11:40-12:00	Fault strength recovery of experimental sandstone fault gouge under superhot geothermal conditions	Chien-Cheng Hung Institute of Earth Sciences, Academia Sinica
12:00-13:30	**Lunch**	

Host: Chien-Cheng Hung, Institute of Earth Sciences, Academia Sinica

13:30-14:00	Cohesion development in faults cross-cutting sedimentary sequences: insight from experiments and field observations	André Niemeijer Department of Earth Sciences, University of Utrecht
14:00-14:30	From back-arc rifting to geothermal exploration in Ilan: Insights from a large-scale dense seismic array experiment	Hsin-Hua Huang Institute of Earth Sciences, Academia Sinica
14:30-14:50	Frictional behavior of the Chungling Formation and its healing under geothermal conditions and implications for induced seismicity	Fang-Yu Tsai Department of Earth Sciences, National Central University
14:50-15:30	**Break**	
15:30-15:50	Stress state of the western Ilan plain, Taiwan	En-Chao Yeh Department of Earth Sciences, National Taiwan Normal University
15:50-16:10	Redox-controlled fluid evolution in metapelitic host rocks	Yi-Chia Lu Institute of Applied Geology, National Central University
16:10-16:30	Using multiple low-temperature thermochronometers to constrain the evolution history of regional heat flow	Shao-Yi Huang Science and Technology Research Institute for DE-Carbonization

Organizers: Institute of Earth Sciences, Academia Sinica
Department of Earth Sciences, National Central University
Carbon Storage and Geothermal Research Center, National Central University

Online register open until 31st Jan, 2026