

Taiwan International Symposium on Land Subsidence

Ground Deformation in a Changing World: Land Subsidence, Climate, and Resilience

13 – 17 April 2026 | Taipei International Convention Center (TICC), Taiwan
[Official Website](#) (Online in early August, 2025)

Workshop and Keynote Speaker



Prof. Ramon Hanssen

Delft University of Technology

Ramon Hanssen is the Antoni van Leeuwenhoek Professor in Geodesy and Satellite Earth Observation at Delft University of Technology. He studied aerospace engineering and geodetic engineering (M.Sc. 1993). He received his PhD degree (cum laude) in the geodetic analysis of repeat-pass spaceborne radar interferometry, with emphasis on error propagation, and wrote a standard textbook on radar interferometry.



Prof. Ronaldo Borja

Stanford University

Ronaldo Borja works in computational mechanics, geomechanics, and geosciences. His research includes developing strain localization and failure models for soils and rocks, modeling coupled solid deformation/fluid flow phenomena in porous materials, and finite element modeling of faulting, cracking, and fracturing in quasi-brittle materials.

Sessions

Monitoring and Measurement of Ground Deformation

Advanced techniques: InSAR, GNSS, LiDAR
Real-time monitoring and smart sensor networks
Integrating remote sensing with in-situ measurements

Mechanisms and Modeling of Subsidence

Hydrogeological and geotechnical processes
Coupled hydro-mechanical and thermo-hydro-mechanical models
Soil behavior in soft ground and aquifer systems
Geological controls on subsidence susceptibility

Geotechnical and Structural Impacts

Building foundation settlement and infrastructure damage
Road collapses, sinkholes, and void detection
Engineering risk assessment of urban subsidence
Ground improvement and soil stabilization technologies

Earth Surface Dynamics and Multi-Hazard Interactions

Landslides, slope instability, and surface deformation
Tectonic activity and earthquake-induced landform change
Climate change effects on groundwater and land deformation
Long-term land surface evolution in deltaic and coastal regions

Impacts, Risk Management, and Adaptation

Socioeconomic and environmental consequences of subsidence
Urban planning and land use in vulnerable areas
Mitigation strategies and adaptation planning
Early warning systems and hazard communication

Policy, Governance, and Public Engagement

Legal frameworks and regulatory responses
Integrated governance of land and water resources
Community involvement and stakeholder coordination
Public awareness, education, and participatory planning

Frontiers and Emerging Topics

Earth surface transition and integrative landscape perspectives
Big data, AI, and digital twin applications in subsidence monitoring
Interdisciplinary and international case studies
Resilient cities and sustainable infrastructure under subsidence risk



Photo by Liang Sing-Kuei

Agenda

2026	4/13	4/14	4/15	4/16	4/17
	Mon.	Tue.	Wed.	Thu.	Fri.
9:00-10:30	Workshop 1	Opening (Keynote)	Session 4 (Keynote)		
10:30-10:45	Break		Break		
10:45-12:15	Workshop 2	Session 1	Session 5		
12:15-13:30	Lunch		Lunch		
13:30-15:00	Workshop 3	Session 2	Session 6	Field trip	Field trip
15:00-15:15	Break		Break		
15:15-16:45	Workshop 4	Session 3	Session 7		
16:45-17:15	Discussion		Closing		
Dinner	Icebreaker	Gala dinner			

Important date

Abstract submission	Aug. 18 – Oct. 31, 2025
Acceptance letter	Nov. 15, 2025
2 nd announcement (Preliminary program)	Dec. 15, 2025
Early bird (author) registration	Nov. 15, 2025 – Dec. 31, 2025
Normal registration deadline	Feb. 15, 2026
3 rd announcement (Final program)	Mar. 15, 2026

Journal special issue

Journal 1:

Terrestrial, Atmospheric and Oceanic Sciences (TAO)

Special Issue:

Ground Deformation in a Changing World: Land Subsidence, Climate, and Resilience

Guest Editors:

Cheng-Yu Ku
National Taiwan Ocean University, Taiwan
Pietro Teatini
University of Padova, Italy
Luigi Tosi
National Research Council, Italy
Ta-Kang Yeh
National Taipei University, Taiwan

Submission deadline:

2026/07/31

Journal 2:

Water (MDPI, Open access)

Special Issue:

Sustainable Groundwater Management and Mitigation of Land Subsidence: Evaluating Environmental Impacts and Resilience Strategies

Guest Editors:

Shih-Jung Wang
National Central University, Taiwan
Wei-Chia Hung
National Yang Ming Chiao Tung University, Taiwan

Submission deadline:

Will extend to 2026/07/31



Photo by Duc-Huy Tran

Organization

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- Pietro Teatini, University of Padova, Italy, and Chair of UNESCO LaSII

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- Geological Survey and Mining Management Agency, MOEA, Taiwan
- National Science and Technology Council, Taiwan

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- Constantinos Loupasakis, National Technical University of Athens, Greece
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- Luke Bateson, British Geological Survey, UK
- Jan Blachowski, Wrocław University of Science and Technology, Poland
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- Greg Connock, USGS, USA
- Quang-Khai Ha, Ho Chi Minh City University of Technology, Vietnam
- Pablo Ezquerro, Spanish Geological Survey, Spain
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- Lin Zhu, Capital Normal University, China

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- I-Hsien Lee, National Central University
- Duc-Huy Tran, National Central University

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