



Newsletter of the Unesco Land Subsidence International Initiative

Vol.49, June 2024

Please, send your comments and suggestions to John.Lambert@deltares.nl

Scholarships

Italy, Univ. Campania

Scholarships for foreign students

The new call for application for the 40th cycle of our PhD program (Academic Year 2024/2025) is again online.

https://www.unicampania.it/RipartizioniFS/RAG/Dottorati_di_Ricerca/40/Bando_40_ciclo_ING.pdf

The reference scheme in the call is Allegato n. 07. There are 7 grants reserved for foreign students.

Prof. Daniela Ruberti has submitted to the committee the research topic shown in the attached document. The applicants are required to write a research proposal; a score will be assigned to the latter and, if it matches one of the research topic of the department, it got the highest evaluation score.

The most general theme is land subsidence but, specifically, all those issues related to the problem of subsidence are included (coastal erosion, aquifer salinization, building damages, and so on).

If a candidate obtains a high score and, therefore, the grant, it is then possible to establish an agreement between both universities to tutor the PhD student together. The study site and methodologies will be defined together.

Contact details: Daniela Ruberti (Daniela.RUBERTI@unicampania.it)

Additional information can be found in the attached files.

New Literature

Handbook (in Spanish)

Guadalupe Bru et al.,

Manual básico sobre el uso de datos InSAR para medir desplazamientos de la superficie del terreno

https://www.researchgate.net/publication/381583672_Manual_basico_sobre_el_uso_de_datos_InSAR_para_medir_desplazamientos_de_la_superficie_del_terreno

France and Overseas Territories

Marc Igigabel et al.,

A systemic and comprehensive assessment of coastal hazard changes: method and application to France and its overseas territories

https://www.researchgate.net/publication/381375348_A_systemic_and_comprehensive_assessment_of_coastal_hazard_changes_method_and_application_to_France_and_its_overseas_territories/references

Indonesia, Medan

Lumban-Gaol, J., Sumantyo, J.T.S., Tambunan, E., Situmorang, D., Antara, I.M.O.G., Sinurat, M.E., Suhita, N.P.A.S.R., Osawa, T., & Arhatin, R.E. (2024, June 13). Sea Level Rise, Land Subsidence, and Flood Disaster Vulnerability Assessment: A Case Study in Medan City, Indonesia [Poster presentation]. APN 26th Joint Intergovernmental and Scientific Planning Group Meeting, Jakarta, Indonesia.

<https://www.apn-gcr.org/publication/sea-level-rise-land-subsidence-and-flood-disaster-vulnerability-assessment-a-case-study-in-medan-city-indonesia/>

Iran, Salmas Plain

Ahmad Najafi Igdir et al.,

Estimation of Land Subsidence in Salmas Plain Using Differential Interferometric Synthetic Aperture Radar Algorithm

<https://www.magiran.com/paper/2721498/estimation-of-land-subsidence-in-salmas-plain-using-differential-interferometric-synthetic-aperture-radar-algorithm?lang=en>

Italy

F. Cigna et al.,

Assessing Current and Future Land Subsidence Risk Induced by Groundwater Exploitation in Italy Using Earth Observation

<https://ieeexplore.ieee.org/document/10537240>

Italy, Ravenna

Bernard A. Schrefler

Review of: "[Perspective] Combatting Relative Sea-Level

Rise at a Global Scale: Presenting the International Panel on

Land Subsidence (IPLS)"

<https://www.qeios.com/read/2MEGU9/pdf>

Italy, Turano Lodigiano

Margherita Righini et al.,

Development of a Proof-of-Concept A-DInSAR-Based Monitoring Service for Land Subsidence

https://www.researchgate.net/publication/381054551_Development_of_a_Proof-of-Concept_A-DInSAR-Based_Monitoring_Service_for_Land_Subsidence/references

Japan, East Coast plain

ChiSan Tsai et al.,

The effects of land subsidence and its mitigating measures on shallow groundwater salinization in the low-lying coastal plain of East Japan

https://www.researchgate.net/publication/381491707_The_effects_of_land_subsidence_and_its_mitigating_measures_on_shallow_groundwater_salinization_in_the_low-lying_coastal_plain_of_East_Japan/references

Malaysia, Western Selangor

Navakanesh M Batmanathan

Impact of Subsidence on Flood Susceptibility in Western Selangor, Malaysia

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4880609

PR China, Guangzhou

Nan Zhang et al.,

Investigating the Mechanism of Land Subsidence Due to Water Network Integration at the Guangzhou Longgui Salt Mine and Its Impact on Adjacent Subway

<https://www.mdpi.com/2073-4441/16/12/1723>

Taiwan, Choushui river fan

Wei-Chia Hung et al.,

Exploring groundwater depletion and land subsidence dynamics in Taiwan's Choushui river alluvial fan: insights from integrated GNSS and hydrogeological data analysis

https://www.researchgate.net/publication/381365911_Exploring_groundwater_depletion_and_land_subsidence_dynamics_in_Taiwan%27s_Choushui_river_alluvial_fan_insights_from_integrated_GNSS_and_hydrogeological_data_analysis/references

Thailand, Bangkok

Sakina Ahmed, Yusuke Hiraga, So Kazama,

Land subsidence in Bangkok vicinity: Causes and long-term trend analysis using InSAR and machine learning,

<https://www.sciencedirect.com/science/article/pii/S0048969724044334>

USA, Texas

Nathalie W. Jung et al.,

Massive Sea-Level-Driven Marsh Migration and Implications for Coastal Resilience along the Texas Coast

<https://www.mdpi.com/2072-4292/16/13/2268>

Peat

Read about the project:

Shaping the Future of Sustainable Peatlands



<https://www.uu.nl/en/research/sustainability/gallery/project-gallery/signature-projects/shaping-the-future-of-sustainable-peatlands>

From the Press

Italy, Venice

New study by Italian scientists predicts Venice will be underwater by 2150

<https://www.euronews.com/green/2024/06/19/new-study-by-italian-scientists-predicts-venice-will-be-underwater-by-2150>

USA, California

Student-designed 7th grade climate curriculum aims to bring joy, rigor

<https://www.k12dive.com/news/climate-curriculum-California-students/717826/>