



You are kindly invited to:

**Geotechnical seminar: 20<sup>th</sup> Šuklje's Day**

Location:  
**Bled, Slovenia**

Date:  
**22th November 2019**

**INTERACTION BETWEEN SLOW AND FAST LANDSLIDING**



**The lecturers:**

**The 20th Šuklje's lecturer prof. Eduardo ALONSO** - Interaction between slow and fast landsliding

**Mr. Gorazd STRNIŠA** - Bridge Pelješac open end steel piles driveability and capacity setup

**dr. Zoran PUČKO** – Digital twin: Geotechnical Data and BIM



## DETAILED PROGRAMME

- 13:00–14:00 Registration
- 14:00–14:45 Opening Ceremony
- 14:45–16:00 **20<sup>th</sup> Šuklje's lecture: prof. Eduardo ALONSO**  
Interaction Between Slow and Fast Landsliding
- 16:00–16:30 Coffee break
- 16:30–17:00 **Gorazd STRNIŠA**  
The Pelješac Bridge: Open-end Steel Piles Driveability and Capacity Setup
- 17:00–17:30 **dr. Zoran PUČKO**  
Digital twin: Geotechnical Data and BIM
- 17:30–18:00 Concluding Ceremony
- 19:00 Formal dinner in Rikli Balance Hotel

## 20<sup>TH</sup> ŠUKLJE'S LECTURE



**Prof. Eduardo Alonso** is Professor of Geotechnical Engineering at the Civil Engineering School of UPC since 1986. He is a past Dean of the School and a past Vice-Rector for research at UPC.

His main research interests include the stochastic analysis of soil heterogeneity, unsaturated soil mechanics, rockfill mechanics, dam engineering, coupled thermo-hydro-mechanical analysis and some chemo-mechanical interactions.

He has maintained a special interest in landslide phenomena, a subject that involves the disciplines of engineering geology, rock mechanics and soil mechanics. Recently he has contributed to the development of a computational technique, the Material Point Method, capable of addressing the static and dynamic aspects of landslide instability. He is known for his contributions to develop unsaturated soil mechanics and his involvement in a variety of Geotechnical Engineering cases, particularly those involving nuclear waste storage, landslides and catastrophic failures.

He has acted as a geotechnical consultant in several countries. He has published more than 400 papers in learned journals and International Conferences and Symposia. He is member of the Royal Academy of Engineering of Spain and he is the immediate past Editor of ICE journal *Géotechnique*. Past honorary lectures include Coulomb, Buchanan, Sowers, Croce, Heim, Kezdi, Rocha, BGA Touring lectures, Rankine and Leonards.



## Interaction between slow and fast landsliding

Eduardo E. Alonso

Professor of Geotechnical Engineering, UPC, Barcelona, Spain

### ABSTRACT

The lecture addresses the dynamics of landslides. Slow (creeping) motions are currently explained by resisting forces which depends on the rate of shearing or, alternatively, by “viscous” concepts. On the other hand, fast landslides require also an explanation, which goes beyond accepted constitutive models for shearing strength. The lecture will describe, as a likely mechanism for rapid motions, the heat-induced water pressurization of the sliding surface. Creeping motions often precede fast acceleration of landslides. The lecture analyses the physics of this transition. Simple landslide geometries provide the basis to interpret the nature and complexities of the interaction between slow and fast sliding regimes. In the final part of the lecture, the formulation is generalized to arbitrary situations by means of a “Material Point Method” (MPM) computational tool. A case under study (a 40 Hm<sup>3</sup> creeping landslide on the valley slope of a reservoir) illustrates the answer offered by the ideas and models developed.

The event hosts also two national invited lecturers: the first is senior consultant for geotechnical foundations **Mr. Gorazd STRNIŠA** and the second is **dr. Zoran PUČKO**, who is working on the application of Building Information Modeling (BIM) in geotechnical engineering.

### REGISTRATION:

Please send the application form for the 20th day of Šuklje day by 04.11.2019 to the organizing committee (ZAG, Dimičeva 12, Ljubljana - Ema Kemperle). You can also apply by e-mail to [sloged@zag.si](mailto:sloged@zag.si) or via the SloGeD website: [http:// SLOGED](http://SLOGED)

### REGISTRATION FEE

	SloGeD members	SloGeD nonmembers
Paid		
until 4th November 2019	100 EUR	130 EUR
after 4th November 2019	130 EUR	150 EUR

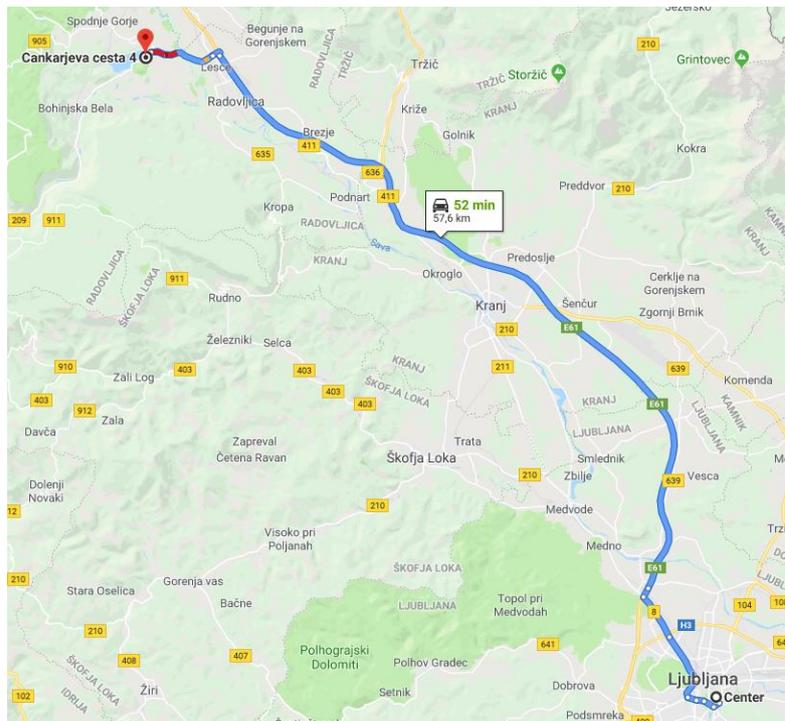
In the registration fee are included proceedings, refreshments during the breaks and the gala dinner.

**VENUE:**



Slovensko geotehniško društvo

**Rikli Balance Hotel, Cankarjeva cesta 4, 4260 Bled, Slovenia**



Distance from Ljubljana center: 58 km

***The Organizing committee***

*Ms. Mojca Ravnikar Turk*

*Ms. Suzana Svetličič*

*Dr. Vojkan Jovičič*

*Ms. Ema Kemperle*