

Website: [www.wlf4.org](http://www.wlf4.org)



# 4<sup>th</sup> WLF 2017

## 4<sup>th</sup> World Landslide Forum LJUBLJANA SLOVENIA EU

# “Landslide Research and Risk Reduction for Advancing Culture of Living with Natural Hazards”

Call for Abstracts

29 May - 2 June 2017

Venue: Cankarjev dom – Cultural and Congress Centre Ljubljana,  
Ljubljana, Slovenia

The event takes place under honorary patronage of the  
President of the Republic of Slovenia, his excellency, Mr. Borut Pahor.



A Programme of  
the ICL for ISDR



University of Ljubljana  
Faculty of Civil and Geodetic Engineering





### Organizers:

- ▶ International Consortium on Landslides (ICL)
- ▶ Global Promotion Committee of the International Programme on Landslides (IPL)
- ▶ Ministry of the Environment and Spatial Planning of the Republic of Slovenia (MOP)
- ▶ Ministry of the Infrastructure of the Republic of Slovenia (MI)
- ▶ Ministry of Defence of the Republic of Slovenia (MORS)
- ▶ Slovenian Chamber of Engineers (IZS)
- ▶ Faculty of Civil and Geodetic Engineering of the University of Ljubljana (UL FGG)
- ▶ Geological Survey of Slovenia (GeoZS)

### Chairpersons:

- ▶ **Matjaž MIKOŠ** (Chairman, Slovenian National Platform for Disaster Risk Reduction)
- ▶ **Yueping YIN** (President, International Consortium on Landslides)
- ▶ **Kyoji SASSA** (Executive Director, International Consortium on Landslides)

### Background:

**The World Landslide Forum (WLF)** is a triennial world conference of scientists, policy makers, professional engineers and practitioners, aiming at international exchange of knowledge, experiences and latest trends in science and engineering development and with focus on landslide risk governance. The WLF1 was organized in 2008 in Tokyo, Japan, followed in 2011 by the WLF2 in Rome, Italy, and in 2014 by the WLF3 in Beijing, China.

### Objectives:

The WLF4 has an objective to be a worldwide event for discussing how landslide research and landslide risk reduction can contribute to advancing culture of living with natural hazards. The risk governance in the field of landslide disaster risk reduction and management means to establish an effective bottom-up system incorporating many relevant stakeholders into a risk dialogue, and enhancing risk communication with the aim to build a sustainable system of prevention and disaster relief in the field of landslide disasters risk reduction. The WLF4 will be the first opportunity to evaluate the progress in the implementation of the ISDR-ICL Sendai Partnerships 2015-2025 for Global Promotion of Understanding and Reducing Landslide Disaster Risk, officially accepted in 2015 at the 3rd United Nations World Conference on Disaster Risk Reduction in Sendai, Japan.

**Deadlines:**

Submission of abstracts	Submission of full papers	Preliminary registration of Exhibitors	Registration of post-forum field trip:	On-site registration
Pre-registration				
31 March 2016	1 August 2016	31 October 2016	31 January 2017	29 May 2017



29 May – 2 June 2017

**Secretariat:**

For registration, accommodation, and visa-related questions please contact:

**CD - Cultural and Congress Centre Ljubljana**, Prešernova cesta 10, SI-1000 Ljubljana, Slovenia; e-mail: [registration@cd-cc.si](mailto:registration@cd-cc.si)

For requests about abstract/paper submission, scientific and other academic issues please contact:

**UL FGG – University of Ljubljana, Faculty of Civil and Geodetic Engineering**, Jamova c. 2, 1000 Ljubljana, Slovenia, e-mail: [secretariat@wlf4.org](mailto:secretariat@wlf4.org)

**Venue:**

The WLF4 will be hosted by the Cankarjev dom – Cultural and Congress Centre Ljubljana in the medieval City of Ljubljana, Slovenia, Europe. The WLF will move from large capital cities (Tokyo, Rome, Beijing) to a capital city (Ljubljana) with less than 300,000 inhabitants. In the past, human interventions into the environment in Slovenia have been subjected to complex geological conditions, and this is still true despite modern technologies and technical advances. The Republic of Slovenia is a young European country but with a long tradition in landslide risk management that was always an important constitutional part of the organised landslide, erosion and torrent control activities that started towards the end of the 19th century during the Habsburg Empire.

**Forum Programme:**

	Monday, May 29	Tuesday, May 30	Wednesday, May 31	Thursday, June 1	Friday, June 2	Saturday, June 3
Morning Sessions	ICL related activities	Opening Ceremony	Parallel Sessions	Parallel Sessions	Plenary Session	Starting of Post-Forum Field Trips
Afternoon Sessions		Special Lecture	Parallel Sessions	Parallel Sessions	Round Table Discussion	
		Lunch	Lunch	Lunch	Lunch	
		High Level Panel Discussion	Parallel Sessions	Parallel Sessions	Closing Ceremony	
		Welcome Reception	Forum Banquet	Parallel Sessions		



## Forum Themes

Scientists, engineers, and researchers/policy makers working in the area of landslide technology, landslide disaster investigation and landslide remediation are encouraged to share their work with the global community by submitting papers and presenting their work at the WLF4. The reviewed contributions to the forum will be published as the forum proceedings by Springer Nature publishing house in a set of five volumes, covering the forum 5 themes organised in sessions.

### Theme 1 – Sendai Partnerships 2015-2025

ICL proposed “ISDR-ICL Sendai Partnerships 2015–2025 for global promotion of understanding and reducing landslide disaster risk – Tools for Implementing and Monitoring the Post-2015 Framework for Disaster Risk Reduction and the Sustainable Development Goals” to the Third United Nations World Conference on Disaster Risk Reduction (WCDRR) held in Sendai, Japan on 14-18 March 2015. The proposal was formally accepted and sixteen intergovernmental, international and national organizations signed the Sendai Partnerships. These partnerships are the central activities within global landslide community from 2015-2025 contributing to the United Nations International Strategy for Disaster Risk Reduction.

**Session 1** – Sendai Partnerships 2015-2025

**Session 2** – International Programme on Landslides (IPL)

**Session 3** – Landslides and Society

### Theme 2 – Advances in Landslide Science

There has been a significant progress in the field of landslide science in recent years. This progress can be attributed to the development of field monitoring and remote sensing technology, development of robust devices for monitoring of landslides as well as field and laboratory testing, availability of highly precision sensors, development of large scale physical modelling facilities, development of high precision and high speed computational infrastructure, 2D to 4D numerical simulation programs, availability of high resolution remote sensing imagery and data processing capabilities, and many other factors. This theme includes the recent advancements made in the research and implementation pertinent to the above mentioned activities in the past couple of years.

**Session 1** – Landslide Field Recognition & Identification: remote sensing techniques, field techniques

**Session 2** – Landslide Investigation: field investigations, laboratory testing

**Session 3** – Landslide Modeling: landslide mechanics and simulation models

**Session 4** – Landslide Hazard, Risk Assessment & Prediction: landslide inventories & susceptibility, hazard mapping methods, damage potential

### Theme 3 – Advances in Landslide Technology

This theme includes the states of the art, the best practice techniques and overall experiences on monitoring, prediction and warning of landslides caused by different triggering factors in different parts of the world. Case studies about landslide disasters under different circumstances from all aspects of landslide praxis are also welcome. Well documented considerations, analyses and design descriptions used in landslide, hazard and risk reduction, mitigation and remediation are expected as contributions to this volume.

**Session 1** – Landslide Monitoring and Warning: monitoring techniques and technologies, early warning systems

**Session 2** – Landslide Disasters and Relief: case studies, emergency measures, first aid, civil protection measures

**Session 3** – Landslide Mitigation, Remediation and Stabilization: landslide protection works, landslide stabilization and remediation, landslide non-structural measures

### Theme 4 – Diversity of Landslide Forms

Landslide occurrence varies according to different causes such as topographic profile, geology, tectonic history, weathering and erosion history and land use and triggers such as an intense rainfall event, an earthquake, a volcanic eruption, a storm wave, or rapid stream erosion.

Landslides and other types of natural hazards such as floods, droughts, wildfires, tsunamis, and volcanoes can be strongly correlated to the so-called cascade effects.

This WLF4 theme includes recent research achievements related to different landslide types in terms of typology, material and triggering factors. This volume will include also research outcomes made on the relationship between landslides and other natural hazards.

**Session 1** – Earthquake-Induced Landslides

**Session 2** – Rainfall-Induced Landslides

**Session 3** – Rapid Landslides: debris flows, mudflows, rapid debris-slides

**Session 4** – Landslides in Rocks and Complex Landslides: rock topples, rock falls, rock slides, complex landslides

**Session 5** – Landslides and Other Natural Hazards: floods, droughts, wildfires, tsunamis, volcanoes

### Theme 5 – Landslides in Different Environments

The main goal of this session is to draw attention to the different variety of landslides with respect to communities, infrastructure and cultural heritage. Landslides in the natural environment will be covered as well, including all forms of aquatic environments. Recent progress in dating techniques has greatly improved the ability to determine the age of various types of landslides. Another challenge is to relate established landslide chronologies to regional paleo-environmental changes (e.g. paleo-seismic events, deglaciation, climatic changes, and human-induced deforestation). We would also like to draw attention to the variety of landslides in the context of different climatic zones, geomorphological and geotechnical settings and triggering factors, in order to gain better knowledge of the possibilities of mitigation and risk management.

**Session 1** – Landslide Interactions with the Built Environment

**Session 2** – Landslides in Natural Environment

**Session 3** – Landslides and Water

**Session 4** – Landslides as Environmental Change Proxies: looking at the past

## Forum side events

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### WLF4 Student Session

Doctoral students are encouraged to present their landslide research in the form of a regular Forum paper. The best student award will be given to the presenting author of the best paper.

### WLF4 Landslide Photo Contest »Landslides and Mankind«

Any photo showing the variety of landslide forms and their interaction with human activities, infrastructure and landscape is invited to be submitted to this Photo Contest. Each photo should have also a short explanation, describing the landslide on the photo and giving its location, causes/triggering factors and consequences. The photos should be submitted to a selected category (maximum 3 to 4). A selection of photos will be published in the Forum proceedings. The best photos in each category will be recognized and awarded by a photo jury. The selected photos will be exhibited in a Photo Exhibition during the WLF4.

### 3<sup>rd</sup> Regional Symposium on Landslides in the Adriatic-Balkan Region (ReSyLAB 2017)

After 1st ReSyLAB (Zagreb, 2013) and 2nd ReSyLAB (Belgrade, 2015) this will be the third regional symposium on landslides organised by the ICL Adriatic-Balkan Regional Network.

## Post-Forum Field Trips

Several post-forum study tours will be organised and offered to Forum participants, tentatively the following ones – they will run in parallel:

- ▶ Variety of Landslide Forms in Slovenia
- ▶ Landslides in Croatia and in western Bosnia and Hercegovina
- ▶ Mitigation of Landslides in the Dolomite Region in northern Italy

## Technical exhibition:

The Forum will offer a place for a Technical Exhibition of trusted and well-established as well as latest technologies, equipment and solutions for innovative detecting, monitoring and early warning systems of different types of landslides.

## Who should attend:

A wide audience is expected to attend the Forum with a diverse background and from different regions of the world and with interest into landslide disaster risk reduction:

- ▶ UN institutions
- ▶ EU institutions and agencies
- ▶ National governments and local authorities
- ▶ Non-governmental organizations with interest & activities in disaster risk reduction
- ▶ International and national civil protection and disaster relief agencies and institutions
- ▶ Private sector involved into research, development, and practical applications of technologies and solutions in the field of landslide risk reduction
- ▶ Research & academic institutions
- ▶ Insurance and re-insurance companies

## Call for Abstracts

You are cordially invited to submit abstracts (400 to 500 words, no photos, no graphs, no tables, text file to be uploaded in Editorial Manager) to Forum before not later than March 31, 2016. All details will be available on the Forum web page [www.wlf4.org](http://www.wlf4.org).

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