

EAGE

EUROPEAN
ASSOCIATION OF
GEOSCIENTISTS &
ENGINEERS

WORKSHOP TECHNICAL PROGRAMME

Third EAGE Workshop on assessment of landslide hazards and impact on communities

20-23 September 2021
Odessa, Ukraine

www.eage.org





Dear Colleagues,

*It is our great pleasure to welcome you to the **Third EAGE Workshop on assessment of landslide hazards and impact on communities** (20-23 September 2021; Odesa, Ukraine). This unique workshop is intended to bring together researchers and practitioners from Europe and the world to share recent advances in the assessment of landslide hazards and development of new techniques for risk mitigation.*

Oral presentations will be presented in sessions covering virtually the entire spectrum of the landslide hazard assessment including social aspects, numerical modelling, simulation of cascading mass flows, creation of national landslide databases, geophysical methods and remote sensing for landslide investigations, landslide susceptibility mapping and others.

We would like to take this opportunity to express our thanks to all people who help make this conference a success. We wish you an enjoyable time in Odesa.

Prof. Dr. Olena Ivanik

Conference chairman

VENUE**MAIN VENUE:**

**Hotel AYVAZOVSKY,
Bunina str, 19, Odesa, Ukraine**

**VIRTUAL VENUE:**

Please register via link [Landslide ZOOM Room](#)

After registering, you will receive a confirmation email containing information about joining the meeting.

WELCOME RECEPTION

MONDAY 20 SEPTEMBER, 16:30 – 19:00. Meet with your colleagues and increase your network, while enjoying delicious Ukrainian food and drinks.

PROGRAMME HIGHLIGHTS

Monday, 20 September

- 11:00 – 17:00 Registration
- 13:00 – 13:30 Opening Ceremony
- 13:30 – 16:30 General session
- 16:30 – 19:00 Welcome reception

GENERAL SESSION

13:00	Opening Ceremony
13:30	Natural Hazards and Landslide Risk Management in Ukraine * Ivanik O., Shevchuk V., Kravchenko D., Tustanovska L., Hadiatska K. (<i>Taras Shevchenko National University of Kyiv, Ukraine</i>)
13:55	Reliability analysis of unsaturated slopes under rapid drawdown with intelligent surrogate models * Wu W., Guardiani C. (<i>BOKU, Austria</i>)
14:20	Risk mapping of the slope mass movement processes for public awareness and community risk preparedness (on the example of Solotvyno) * Shekhunova S.B., Stadnichenko S.M., Aleksieienkova M.V., Kril T.V., Siumar N.P. (<i>Institute of Geological Sciences of the National Academy of Sciences of Ukraine</i>)
14:45	Landslides at the North-Western Black Sea Coast (Ukraine) and the Engineering & Geological Effectiveness of Landslide Prevention Works * Cherkez E.A., Kozlova T.V., Shatalin S.N., Medinets V.I., Medinets S.V., Soltys I.E. (<i>Odessa National I.I. Mechnikov University, Ukraine</i>)
15:10	Features of development, forecast and engineering protection against landslides on the territory of Ukraine * Rudko H. (<i>State Commission of Ukraine on Mineral Resources, Ukraine</i>)
15:35	MPM modelling of flow-like landslides impacting artificial barriers * Angela Di Perna (<i>University of Salerno, Italy</i>)
16:00	Methodical approaches of geophysical research of landslide areas Vyzhva S., *Onyshchuk V., Onyshchuk I., Orlyuk M., Reva M., Shabaturo O. (<i>Taras Shevchenko National University of Kyiv, Institute of Geology, Ukraine</i>)

Tuesday, 21 September

- 9:00 – 18:00 Registration
- 9:30 – 18:20 Technical Sessions

Wednesday, 22 September

- 8:00 – 18:00 One day Field trip

MONDAY, 20 September- HALL A

GENERAL SESSION	
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TUESDAY, 21 September- HALL A
**ASSESSMENT OF NATURAL HAZARDS AND NEW TECHNIQUES FOR RISK MITIGATION.
SOCIAL ASPECTS OF LANDSLIDE HAZARDS ASSESSMENT.**
GEOPHYSICAL METHODS AND REMOTE SENSING FOR LANDSLIDE INVESTIGATIONS

Session Chair: Olena Ivanik, Evgen Cherkez

9:00	Morning coffee
9:30	Application of remote sensing data for detection the landslide areas in Ukraine Yelistratova L., Apostolov A., Romanciuc I., *Orlenko T. (<i>SI "Scientific Centre for Aerospace Research of the Earth" IGN NAS, Ukraine</i>), Tymchyshyn M. (<i>National Aviation University, Ukraine</i>)



9:50	Geophysical methods for landslide investigation applied in Gornet area *Stoian Liliana-Irina (<i>University of Bucharest Faculty of Physics; Geological Institute of Romania, Romania</i>), Maftai R.M., Rusu E., Farnoaga R., Filipciuc C., Tudor E. (<i>Geological Institute of Romania</i>)
10:10	Geoelectrical assessment of landslide-prone area with loess geology *Bondar K., Khomenko R., Ivanik O., Shevchuk V., Hadiatska K., Trofimenko P., Kravchenko D. (<i>Taras Shevchenko National University of Kyiv, Ukraine</i>)
10:30	Geophysical study of the landslide-prone areas of Kyiv region Ivanik O., Bondar K., Shevchuk V., Tustanovska L., Kravchenko D., *Hadiatska K. (<i>Institute of Geology of Taras Shevchenko National University of Kyiv, Ukraine</i>)
10:50	Mesofractures as factors of hazardous geological processes within Middle Dnieper area Kravchenko D., *Drozdova A., Ivanik O., Tiukhtei A. (<i>Taras Shevchenko National University of Kyiv, Ukraine</i>)
11:10	Risk management and advanced systems for observing, monitoring and forecasting natural disasters and events *TuzyakYa. M. (<i>Ivan Franko National University of Lviv, Ukraine</i>), Tuzyak O. (<i>Lviv Regional Center for Hydrometeorology</i>)
11:30	Coffee Break
11:50	Influence of technogenic objects on the development of landslides in the South of Kryvbass Pigulevskiy P. (<i>Institute of Geophysics of NAS of Ukraine, Ukraine</i>), *Svistun V.K. (<i>Dnepropetrovsk geophysical expedition "Dneprogeofizika"</i>)
12:10	Application of geoinformation technologies in simulation of landslide processes *Semeniaka V.Yu., Zatserkovny V., Ilchenko A., Yevsieieva-Severyna I. (<i>Taras Shevchenko National University of Kyiv, Ukraine</i>), Ilyin L. (<i>Lesya Ukrainka Volyn National University, Ukraine</i>)
12:30	Landslides hazards in the location of the Stebnyk potassium salt mine *Sapuzhak I. Ya. (<i>S.I. Subbotin name Institute of Geophysics of NAS of Ukraine, Department of seismicity of the Carpathian region (IGPh NASU, DSCR), Lviv, Ukraine</i>)

REGIONAL AND LOCAL FORECASTING OF LANDSLIDES. MONITORING AND MULTISCALE MODELLING OF LANDSLIDES

Session Chair: Olena Ivanik, Dmytro Kravchenko

12:50	Wave Nature of Deformation Processes in Landslide Slopes of the North-Western Black Sea Area (Ukraine) *Kozlova T.V., Cherkez E.A., Shatalin S.M., Melkonyan D.V., Medinets V.I., Medinets S.V. (<i>Odesa National I. I. Mechnikov University, Ukraine</i>), Mitinskiy V.M. (<i>Odesa State Academy of Civil Engineering and Architecture, Ukraine</i>)
13:10	Application of potential field theory to the elastic analysis of deformation and stability of slopes *Melkonyan D.V., Cherkez E.A., Oprits H.A. (<i>Odesa National I.I. Mechnikov University, Ukraine</i>)
13:30	Identification of pull-apart structures within Eastern Carpathians and their influence on landslide processes propagation Kravchenko D., *Romanchuk N., Ivanik O. (<i>Taras Shevchenko National University of Kyiv, Ukraine</i>)
13:50	Break

15:00	Kinematics and forecasting the time of failure of deep-seated landslides in the area of the Odessa district (Ukraine) *Melkonyan D.V., Cherkez E.A., Kozlova T.V., Shatalin S.N., Oumar Traore, Oprits G.A. (Odessa National I.I. Mechnikov University, Ukraine)
15:20	Extreme manifestations of solar activity and their impact on the geosphere *Lozitsky V.G., Efimenko V.M. (Astronomical Observatory of the Taras Shevchenko National University of Kyiv, Ukraine)
15:40	Calculation of loss inflicted and expected caused by dangerous geological natural events (case of abrasion and landslide) *Horoshkova L., Khlobystov Ie. (National university of "Kyiv-Mohyla academy", Ukraine), Menshov O. (Taras Shevchenko National University of Kyiv, Ukraine)
16:00	Features of forecasting the strength of slopes and shear pressure in conditions of density construction *Dyniak O.V., Koshliakova T., Koshliakova I., Koshliakov O. (Institute of Geology of Taras Shevchenko National University of Kyiv, Ukraine)
16:20	Beach role in abrasion and landslides processes development (northwestern coast of the Black Sea, Ukraine) *Pedan H.S., Kadurin S., Andreeva K. (Odessa National I.I. Mechnikov University, Ukraine), Dragomyretska O. (State Institution "Hydroacoustic Branch of Institute of Geophysics S.I.Subbotin of National Academy of Sciences of Ukraine")
16:40	Research of the influence of salt mining working of SE "Solotvynsky Solerudnyk" on the ground's surface, buildings and structures using satellite radar monitoring Pakshyn M., Liaska I. (Center for the reception and processing of special information and control of the navigation field), *Kablak N.I., Reity O., Kutsyna I. (Uzhhorod National University, Ukraine)
17:00	Manifestation of the basic dialectics laws in slope processes as exemplified by the Poshtova Square reconstruction in Kyiv *Chornomordenko I., Voloshkina O., Mokan N., Bondarenko N., Spiridonov M., Stavroiani S. (Kyiv National University of Construction and Architecture, Ukraine)
17:20	Geodynamic body of the geomorpholithosphere of Kyiv and some practical aspects *Komliev A.A. (Taras Shevchenko National University of Kyiv, Ukraine), Beydik A. (Bogdan Khmel'nitsky Melitopol State Pedagogical University), Bortnyk S. (Taras Shevchenko National University of Kyiv, Ukraine; Yan Kochanowski University of Kielce, Poland), Spitsia R. (Institute of Geography of NAS of Ukraine, Ukraine), Zhylkin S. (Institute of Geography of NAS of Ukraine, Ukraine), Filonenko Yu. (Nizhyn Mykola Gogol State University, Ukraine)
17:40	Changes in the grain composition of the beach sediments of the Odessa Bay as a result of the landslide protective measures and impact on the littoral ecosystem *Fedoronchuk N., Goncharova I. (Odessa National I.I. Mechnikov University, Ukraine), T. Kukovska (State Scientific Institution "Center for Problems of Marine Geology, Geoecology and Sedimentary Ore Formation of the National Academy of Sciences of Ukraine)
18:00	Major mass movement provenances in East Anatolia, Turkey *Mehmet Salih Bayraktutan (Igdır University, Turkey)

FIELD TRIP

Wednesday, 22 September

One-day field trip will take place within Odesa region of Ukraine. This area features active development of landslide phenomena, abrasion processes, floods and side erosion.



The tour will cross the north-western coast of the Black Sea, we will see the fascinating landscapes and examples of different types of landslides and coastal protection structures. More information you can find in the Field Guide.