

EAGE

EUROPEAN
ASSOCIATION OF
GEOSCIENTISTS &
ENGINEERS

TECHNICAL PROGRAMME

Fifth EAGE Workshop on Assessment of Landslide Hazards and Impact on Communities

15-18 September 2025
Ukraine

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Dear Colleagues,

*It is our great pleasure to welcome you to the **Fifth EAGE Workshop on assessment of landslide hazards and impact on communities** (15-18 September 2025, Ukraine). This unique workshop aims to bring together researchers and practitioners from all over the world to share recent advances in landslide hazard assessment and the development of new techniques for risk mitigation.*

The oral presentations will be organized into sessions covering nearly the full spectrum of landslide monitoring and hazard assessment, including monitoring and multiscale modelling of landslides, regional and local forecasting of landslide hazards and early warning systems, using of geophysical methods and remote sensing for landslide investigations, application of AI and ML to landslide hazards, and more.

On behalf of the EAGE Technical Community on Geohazards, we would like to highlight the exceptional importance of these topics in preventing georisks and minimizing their negative consequences.

Our workshop stands as proof that geology knows no borders, and that the combined efforts of scientists from all nations are essential in addressing geohazards and reducing the associated risks.

We would like to take this opportunity to thank everyone whose contributions have helped make this workshop possible and successful.

Prof. Dr. Olena Ivanik

Conference chairman

Chair, EAGE technical community on geohazards

INTERNATIONAL PROGRAMME COMMITTEE

Dr. Olena Ivanik	Taras Shevchenko National University of Kyiv (Ukraine)
Dr. Sergiy Vyzhva	Taras Shevchenko National University of Kyiv (Ukraine)
Dr. Stella Shekhunova	Institute of Geological Sciences, National Academy of Sciences of Ukraine (Ukraine)
Dr. Wei Wu	University of Natural Resources and Life Sciences (Austria)
Dr. Daniel Sturmer	University of Cincinnati (USA)
Dr. Samuele Segoni	University of Florence (Italy)
Dr. Mihai Micu	Institute of Geography, Romanian Academy of Science (Romania)
Dr. Olexandr Menshov	Taras Shevchenko National University of Kyiv (Ukraine)
Dr. Christian Zangerl	University of Natural Resources and Life Sciences, (Austria)
Dr. Dmytro Kravchenko	Taras Shevchenko National University of Kyiv (Ukraine)
Dr. Jean-Jacques BITEAU	(France)
Dr. Kateryna Hadiatska	Taras Shevchenko National University of Kyiv (Ukraine)
Dr. Roxana L. Ciurean	British Geological Survey (UK)

VENUE

The workshop will be held **virtually via Zoom**.

Zoom link to all sessions

<https://knu-ua.zoom.us/j/84060533942?pwd=nh2aiAfUle2uT8Ae28mbFP5opbbxUI.1>

Please also note that **all times in the workshop schedule are given in Kyiv time (GMT+3)**.



PROGRAMME HIGHLIGHTS

Monday, 15 September

11:00 – 17:00 Registration

13:00 – 13:30 Opening Ceremony

13:30 – 17:00 General session

GENERAL SESSION

Session Chair: Dr. Olena Ivanik

13:00	Opening Ceremony
13:30	Keynote Presentation [Landslide25_36] A survey of large-scale landslide deposits in Nevada, USA * D.M. Sturmer (<i>University of Cincinnati, Department of Geoscience</i>), O. Ivanik (<i>Taras Shevchenko National University of Kyiv, Department of General and Historical Geology, Institute of Geology; University of Cincinnati, Department of Geoscience</i>)
13:55	Invited speaker Reliability analysis of slope stability under rapid drawdown by machine learning Wei Wu (<i>University of Natural Resources and Life Sciences, Austria</i>)
14:20	Invited speaker A new approach to understand the recurrence and the severity of hydro-geological disasters in Italy S. Segoni (<i>University of Florence, Department of Earth Sciences</i>)
14:45	[Landslide25_08] Landslide Inventories and Key Hazard Drivers in the Ukrainian Carpathians: The Upper Latoritsa Basin Case * O. Ivanik (<i>Taras Shevchenko National University of Kyiv, Department of General and Historical Geology, Institute of Geology; University of Cincinnati, Department of Geoscience</i>), K. Hadiatska , D. Kravchenko (<i>Taras Shevchenko National University of Kyiv, Department of General and Historical Geology, Institute of Geology</i>), N. Maslun (<i>Institute of Geological Sciences of the NAS of Ukraine</i>), O. Pochaievets (<i>Taras Shevchenko National University of Kyiv, Geographical Faculty</i>), M. Petrenko (<i>Taras Shevchenko National University of Kyiv, Department of General and Historical Geology, Institute of Geology</i>)
15:10	[Landslide25_32] Slope mass movement processes susceptibility and risk assessment for the territory affected by the former Kakhovka Reservoir S. B. Shekhunova (<i>Institute of Geological Sciences of the NAS of Ukraine</i>), * S. M. Stadnichenko (<i>Institute of Geological Sciences of the NAS of Ukraine</i>), N. P. Siumar (<i>Institute of Geological Sciences of the NAS of Ukraine</i>), O. P. Lobasov (<i>Institute of Geological Sciences of the NAS of Ukraine</i>)
15:35	[Landslide25_22] Exploring the Interplay Between Urbanization and Hydrogeological Disaster Impacts in Italy * A. Gatto (<i>University of Florence, Department of Earth Sciences</i>), F. Martellozzo (<i>University of Florence, Department of Economics and Business Sciences</i>), S. Clo' (<i>University of Florence, Department of Economics and Business Sciences</i>), L. Ciulla (<i>University of Florence, Department of Economics and Business Sciences</i>), S. Segoni (<i>University of Florence, Department of Earth Sciences</i>)



16:00	<p>[Landslide25_28] Identifying buried landslide deposits using passive-source seismic (Deep ReMi) analysis, a case study from Washoe Valley, Nevada, USA</p> <p><i>*D.M. Sturmer (University of Cincinnati, Department of Geosciences), J.N. Louie (Terēan)</i></p>
16:25	<p>[Landslide25_17] A nation-wide nowcasting system for Italy combining rainfall thresholds and risk indicators</p> <p><i>*N. Nocentini (University of Florence, Department of Earth Sciences, Florence, Italy), A. Gatto (University of Florence, Department of Earth Sciences, Florence, Italy), C. Medici (University of Florence, Department of Earth Sciences, Florence, Italy), F. Barbadori (University of Florence, Department of Earth Sciences, Florence, Italy), S. Segoni (University of Florence, Department of Earth Sciences, Florence, Italy)</i></p>
16:50	
Tuesday, 16 September	
	<p>9:00 – 18:00 Registration</p> <p>9:30 – 18:00 Technical Sessions</p>
Wednesday, 17 September	
	<p>16:00 – 18:00 Demonstration by Kentucky Geological Survey (USA)</p> <p>“Landslide Inventory, Susceptibility Map Development, and Slope Instrumentation in Kentucky, USA”.</p> <p><i>Jason Dortch, Sarah Johnson, Hudson Koch (Kentucky Geological Survey (USA))</i></p> <p>The demonstration will be presented by leading professionals in landslide hazard assessment, showcasing cutting-edge methods with ArcGIS Pro and Lidar data.</p>

TUESDAY, 16 September
REGIONAL AND LOCAL FORECASTING OF LANDSLIDES. MONITORING AND MULTISCALE MODELLING OF LANDSLIDES
Session Chair: Dr. Kateryna Hadiatska

9:00	Morning coffee
9:30	<p>[Landslide25_05] Studying the slope stability at 4 M.Hrinchenka Street in Kyiv and technical solutions for its stabilization</p> <p>V. Tytarenko (<i>The State Enterprise "The State Research Institute of Building Constructions"</i>), O. Tytarenko (<i>National Technical University of Ukraine</i>), V. Polevetskiy (<i>Yuriy Fedkovych Chernivtsi National University</i>), I. Zhemelinsky (<i>National University of Life and Environmental Sciences of Ukraine</i>), Y. Berchun, *I. Kaliukh (<i>Institute of Telecommunication and Global Information Space NASU</i>)</p>
9:45	<p>[Landslide25_15] Monitoring of hydrogeological impact on the landscape integrity within Kyiv-Pechersk Lavra</p> <p>*L. Tustanovska, V. Nesterovskyi (<i>Taras Shevchenko National University of Kyiv, Institute of Geology</i>), S. Taranenko, I. Cherevko (<i>National Preserve «Kyiv-Pechersk Lavra», Kyiv</i>)</p>
10:00	<p>[Landslide25_14] Landslide mitigation measures along the banks of Carpathian rivers</p> <p>*K. Ribun, N. Goptarova, V. Khomyn, L. Uhrak, M. Medvid (<i>Ivano-Frankivsk National Technical University of Oil and Gas</i>)</p>
10:15	<p>[Landslide25_11] Modeling subsidence of the ground surface over a flooded coal mine due to hydrological processes and corrosion of main support equipment</p> <p>*Y. Zbykovskyy (<i>Donetsk National Technical University, Ukraine; E.O. Paton Electric Welding Institute (PWI), Ukraine</i>), V. Kalynychenko (<i>Donetsk National Technical University, Ukraine</i>), I. Shvets (<i>Donetsk National Technical University, Ukraine; E.O. Paton Electric Welding Institute (PWI), Ukraine</i>)</p>
10:30	<p>[Landslide25_25] Factors of the ground surface subsidence above the flooded coal mines in the Donetsk region: new dangers and risks</p> <p>*I. Shvets (<i>Donetsk National Technical University, Ukraine; E.O. Paton Electric Welding Institute (PWI), Ukraine</i>), Y. Zbykovskyy (<i>Donetsk National Technical University, Ukraine; E.O. Paton Electric Welding Institute (PWI), Ukraine</i>), V. Kalynychenko (<i>Donetsk National Technical University, Ukraine</i>)</p>
10:45	<p>[Landslide25_16] Integrative Landslide Prediction Model in Zakarpattia Region</p> <p>*V. Hudak (<i>Taras Shevchenko National University of Kyiv</i>), V. Semeniaka (<i>Taras Shevchenko National University of Kyiv</i>), V. Zatserkovnyi (<i>Taras Shevchenko National University of Kyiv</i>), I. Stakhiv (<i>Taras Shevchenko National University of Kyiv</i>), L. Ilyin (<i>Lesya Ukrainka Volyn National University</i>), T. Pastushenko (<i>Taras Shevchenko National University of Kyiv</i>)</p>



11:00	<p>[Landslide25_10] Assessment of the slope stability at the gazebos locations within Volodymyrska Hirka site, Kyiv</p> <p>V. Siedin, V. Kovba, V. Zahilskyi (<i>Department of Engineering Geology and Geotechnics, Ukrainian State University of Science and Technologies SEI "Prydniprovsk State Academy of Civil Engineering and Architecture"</i>), *Y. Berchun (<i>Environmental Department, Institute of Telecommunication and Global Information Space NASU</i>)</p>
11:15	<p>[Landslide25_06] Geostructural factors and spatial modelling of landslide processes in Transcarpathia based on GIS and multiple regression</p> <p>*B. Tkachuk, L. Shtohryn, D. Kasiyanchuk (<i>Ivano-Frankivsk National Technical University of Oil and Gas</i>)</p>
11:30	<p>[Landslide25_24] Hydrogeological monitoring for landslide hazard mitigation: case study of the near-caves slope of Kyiv-Pechersk lavra</p> <p>*I. Cherevko (<i>National Reserve "Kyiv-Pechersk Lavra"</i>), T. Kril (<i>Institute of Geological Sciences of the NAS of Ukraine</i>), V. Saprykin (<i>National Reserve "Kyiv-Pechersk Lavra"</i>)</p>
11:45	Break
<p>Assessment of natural hazards and new techniques for risk mitigation</p> <p><i>Session Chair: Dr. Dmytro Kravchenko</i></p>	
12:00	<p>[Landslide25_02] Analyzing Slope Steepness for Sustainable Agricultural Land Management in the Vinnytsia Urban Territorial Community Using GIS</p> <p>L. Datsenko, *M. Dubnytska, O. Mikhno, N. Polyakova, M. Sytnyk, S. Titova (<i>Taras Shevchenko National University of Kyiv</i>)</p>
12:15	<p>[Landslide25_26] Assessing stability and landslide hazard risks on Kyiv's Dnieper slopes: a zoning methodology</p> <p>T. Kril, *A. Streltsov (<i>Institute of Geological Sciences of the NAS of Ukraine</i>)</p>
12:30	<p>[Landslide25_13] Impact of structural construction on the activation of exogenous processes near wells</p> <p>*B. Stasiv, N. Goptarova, L. Uhrak, M. Medvid, O. Paliychuk (<i>Ivano-Frankivsk National Technical University of Oil and Gas</i>)</p>
12:45	<p>[Landslide25_21] Mechanism of excess surface water discharge: findings from repeated studies in a Kryvbas Quarry</p> <p>P. Pigulevskiy (<i>S.I. Subbotin Institute of Geophysics of NAS of Ukraine, Kyiv, Ukraine</i>), V. Svistun (<i>Dnipropetrovsk Geophysical Expedition "Dniprogeofizika", Dnipro, Ukraine</i>), *S. Yaremii (<i>Dnipro University of Technology, Dnipro, Ukraine</i>), L. Anisimova (<i>M.S. Poliakov Institute of Geotechnical Mechanics of the NAS of Ukraine, Dnipro, Ukraine</i>)</p>



13:00	<p>[Landslide25_30] Seismic consequences of geodynamic processes in the context of salt karst activation at the Stebnyk potash deposit: calculated and observed data</p> <p>V. Dyakiv (<i>Lviv State University named after I. Franko</i>), *I. Sapuzhak (<i>The Institute of Geophysics (IGP) of the National Academy of Sciences of Ukraine</i>), Z. Khevpa (<i>State Institution "The Institute of Environmental Geochemistry of National Academy of Sciences of Ukraine"</i>)</p>
13:15	Lunch Break
Remote sensing for landslide hazard assessment <i>Session Chair: Dr. Olena Ivanik</i>	
13:45	<p>[Landslide25_07] Geodynamic Monitoring of the Lopushne-Rososh Main Gas Pipeline Using Remote Sensing Data</p> <p>O. Titarenko (<i>State Institution "Scientific Centre for Aerospace Research of the Earth of the Institute of Geological Sciences of the National Academy of Sciences of Ukraine"</i>), *O. Sedlerova (<i>State Institution "Scientific Centre for Aerospace Research of the Earth of the Institute of Geological Sciences of the National Academy of Sciences of Ukraine"</i>), D. Liashenko (<i>Taras Shevchenko National University of Kyiv</i>)</p>
14:00	<p>[Landslide25_20] Monitoring of activation and neotectonic dependence of landslide processes within the Right Bank of Kyiv</p> <p>V. Filipovych, L. Lischenko, *S. Marhes (<i>State Institution "Centre of Aerospace Research of the Earth of the Institute of Geological Sciences of the National Academy of Science of Ukraine"</i>)</p>
14:15	<p>[Landslide25_33] Satellite-Based Monitoring of Landslides in Mountainous Areas Using Orthorectified ALOS PALSAR-1 DEM and Sentinel-1 Time Series Change Detection</p> <p>*V. Udovychenko (<i>Taras Shevchenko National University of Kyiv, Ukraine</i>)</p>
14:30	<p>[Landslide25_18] Remote sensing and Google Earth Engine for regional landslide assessment in the Carpathians</p> <p>L. Davybida (<i>Ivano-Frankivsk National Technical University of Oil and Gas</i>)</p>
14:45	<p>[Landslide25_12] Determining the Impact of Anthropogenic Activity on Landslide Hazard Formation Using Remote Sensing Data</p> <p>L. Yelistratova, *A. Apostolov, A. Khodorovskyi, A. Khyzhniak (<i>State Institution "Scientific Centre for aerospace research of the Earth of the Institute of Geological Sciences of the National Academy of Sciences of Ukraine"</i>)</p>
15:00	<p>[Landslide25_09] Assessing the Impacts of Landslides on Hydrological Structure and Vegetation in the Swiss Municipality of Blatten</p> <p>T. Malik, *B. Tsibenko, I. Honchar, D. Liashenko, V. Kravchenia, O. Tsvyk (<i>Institute of Geology Taras Shevchenko National University of Kyiv</i>)</p>



15:15	<p>[Landslide25_01] Landslide Hazard Assessment in the Kurdistan Mountains, Northern Iraq: A Remote Sensing and GIS Perspective</p> <p><i>*J. Doski (Duhok Polytechnic University, Kurdistan, Iraq)</i></p>
15:30	<p>[Landslide25_19] Spatial Analysis of Landslide Hazard Based on Satellite-Derived Slope Gradient and Soil Moisture: The Zagora Province, Morocco</p> <p><i>*T. Orlenko (Scientific Centre for Aerospace Research of the Earth of the Institute of Geological Sciences of the NAS of Ukraine), T. Kril (Institute of Geological Sciences of the NAS of Ukraine), O. Azimov (Scientific Centre for Aerospace Research of the Earth of the Institute of Geological Sciences of the NAS of Ukraine), B. Sadiq (Cadi Ayyad University), H. Ibouh (Cadi Ayyad University), D. Mezzane (Cadi Ayyad University)</i></p>
15:45	<p>[Landslide25_31] Data-Driven Landslide Susceptibility Analysis in the Ukrainian Carpathians: A Machine Learning Approach</p> <p><i>*R. S. Ajin (Department of Earth Sciences, University of Florence (UNIFI)), K. Hadiatska, O. Ivanik, D. Kravchenko, E. Petrushenko (Department of General and Historical Geology, Institute of Geology, Taras Shevchenko National University of Kyiv), S. Segoni (Department of Earth Sciences, University of Florence (UNIFI))</i></p>
16:00	Break
Integrated monitoring and characterization of landslide sites <i>Session Chair: Dr. Olena Ivanik</i>	
16:15	<p>[Landslide25_03] Key Factors and Mechanisms of Landslide Formation in northeastern Nevada: A Case Study of the Spruce Mountain Landslide</p> <p><i>D.M. Sturmer (University of Cincinnati, Department of Geoscience), *O. Ivanik (Taras Shevchenko National University of Kyiv, Department of General and Historical Geology, Institute of Geology; University of Cincinnati, Department of Geoscience), M. Doyle (University of Cincinnati, Department of Geoscience)</i></p>
16:30	<p>[Landslide25_23] Landslide and erosion–accumulation process monitoring in the upper reaches of the Prut River basin, Ukrainian Carpathians</p> <p><i>*V. Brusak, I. Hnatiak (Ivan Franko National University of Lviv), I. Brusak (Lviv Polytechnic National University)</i></p>
16:45	<p>[Landslide25_35] GIS-based spatial modeling for landslide assessment in the Transcarpathian region</p> <p><i>*K. Hadiatska (Taras Shevchenko National University of Kyiv), E. Petrushenko (Taras Shevchenko National University of Kyiv), M. Petrenko (Taras Shevchenko National University of Kyiv), D. Klemenkov (Taras Shevchenko National University of Kyiv), S. Omokhovskiy (Taras Shevchenko National University of Kyiv)</i></p>



17:00	<p>[Landslide25 27] Insights on source, timing, and depositional conditions of the Spruce Mountain landslide from mapping in the Spruce Well 7.5' Quadrangle, south-central Elko County, Nevada</p> <p>*M.J. Doyle, D.M. Sturmer (<i>University of Cincinnati, Department of Geosciences</i>), O. Ivanik (<i>Taras Shevchenko National University of Kyiv, Department of General and Historical Geology, Institute of Geology; University of Cincinnati, Department of Geoscience</i>), D. Ward, S.J. Hammer (<i>University of Cincinnati, Department of Geosciences</i>), JR Knott (<i>California State University, Fullerton, Department of Geological Sciences</i>)</p>
17:15	<p>[Landslide25 29] Integrated geotechnical monitoring on St. Andrew's Hill</p> <p>N. Molochkova, L. Nishchuk (<i>National Conservation Area "St. Sophia of Kyiv"</i>), *V. Saprykin (<i>State Institution "Radioenvironmental Centre of National Academy of Sciences of Ukraine" (SI "REC NASU")</i>)</p>
17:30	<p>[Landslide25 34] Landslide processes and mapping of their geocological risks within the Yasinia Community, Ukrainian Carpathians</p> <p>*M. Karabiniuk (<i>Uzhhorod National University</i>), V. Leta (<i>Mukachevo State University</i>), O. Tytarenko (<i>Yasinia Settlement Council</i>)</p>
17:45	Final Discussion

Wednesday, 17 September

16:00 – 18:00 Demonstration by Kentucky Geological Survey (USA)

"Landslide Inventory, Susceptibility Map Development, and Slope Instrumentation in Kentucky, USA".

Jason Dortch, Sarah Johnson, Hudson Koch (Kentucky Geological Survey (USA))

The demonstration will be presented by leading professionals in landslide hazard assessment, showcasing cutting-edge methods with ArcGIS Pro and Lidar data.