

**DEBRIS FLOWS: DISASTERS, RISK, FORECAST, PROTECTION**

5<sup>th</sup> International Conference. Tbilisi, Georgia, 1-5 October 2018

**СЕЛЕВЫЕ ПОТОКИ: КАТАСТРОФЫ, РИСК, ПРОГНОЗ, ЗАЩИТА**

5-я международная конференция. Тбилиси, Грузия, 1-5 октября 2018 г.

**ღვარცოფები: კატასტროფები, რისკი, პროგნოზი, დაცვა**

მე-5 საერთაშორისო კონფერენციის. თბილისი, საქართველო, 1-5 ოქტომბერი, 2018



# **Programme of the conference**

**Программа  
конференции**

**კონფერენციის  
პროგრამა**



## Conference location

Administrative building of the Georgian Technical University, 77 Merab Kostava St., Tbilisi, Georgia (<http://gtu.ge/Eng/>)



Tbilisi City. View from Narikala Fortress.



Georgian Technical University.  
Administrative building



<https://binged.it/2NUVmnO>

The conference will be held on the second floor in the large conference hall (LCH) and conference room (CR).

The Exhibition and Poster session will be held in the foyer in front of the conference hall.



## Sessions and conveners

OCTOBER 1, 2018			
8:00-9:00	Registration of participants		Foyer
9:00-9:45	Opening Ceremony. Greetings		LCH
09:45-11:15	A1. Plenary session	Gavardashvili G., Chernomorets S.	LCH
11:15-13:00	A2. Debris flow risk reduction: from science to practice and international collaboration	Tovmasyan K., Gaprindashvili G.	LCH
14:30-16:00	A3. Debris flows and climate	Jomelli V., Yafyazova R.	LCH
16:15-18:00	A4. Debris flow disasters	Wei F., Garankina E.	LCH
18:00-19:00	Concert for participants of the conference		LCH
OCTOBER 2, 2018			
09:00-11:00	B1. Debris flow mitigation and monitoring	Strom A.	LCH
09:00-11:00	B2. Debris flow hazard assessment	Shnyparkov A., Kadetova A.	CR
11:15-13:00	B3. Modelling of debris flows and floods	Bartelt P., Kidyaeva V.	CR
11:15-13:00	B4. Debris flow formation in different conditions	Talanov E., Kozireva E.	LCH
14:30-15:45	B5. Regional analysis of debris flows	Sokratov S., Pryakhina G.	LCH
16:00-17:30	B6. Where will disaster happen next? Modelling future lakes for risk management and decision-making	Shahgedanova M., Kapitsa V.	LCH
17:30-18:15	B7. Poster session		Foyer
17:30-18:30	B8. Meeting for members of the Presidium of the Debris Flow Association and of the Organizing Committee		LCH
19:00	Gala-Dinner		
OCTOBER 3, 2018			
09:00-09:15	Special announcement	Husani H., Bobov R., Chernoimoret S.	LCH
9:15-11:00	C.1 methods and results of debris flow investigations	Ranova S.	LCH
11:15-13:00	C2. Methods and results of debris flow investigations	Kazakov N., Vinogradova T.	LCH
14:30-16:00	C3. Methods and results of debris flow investigations	Kalov R.	LCH
16:00-17:00	Discussion and resolution	Chernomorets S., Gavardashvili G.	LCH
17:00-17:30	Closing Ceremony		LCH

## Exhibitions (October 1, 2, 3)

IBTP Koschuch e.U.
Geobrugg AG
Geo-Barrier
Caucasus Road Project



## Sessions schedule

Last name	First name	Title of presentation
<b>OCTOBER 1, 2018</b>		
<b>REGISTRATION OF PARTICIPANTS</b>		
<b>OPENING CEREMONY: Greetings</b> <i>Prangishvili A., Khutsishvili S., Jomelli V., Tovmasyan K., Chernomorets S., Wei F., Solomina O., Bekkiev M., Tokmajyan O.</i>		
<b>A1. PLENARY SESSION</b> <b>Conveners: Gavardashvili G., Chernomorets S.</b> <b>09:45-11:15</b>		
<b>Blagovechshenskiy</b>	Victor	<b>The debris flows automated monitoring system project in Ile Alatau</b> <i>Medeu A., Blagovechshenskiy V., Askarova M., Gulyaeva T., Ranova S.</i>
<b>Gavardashvili</b>	Givi	<b>Hydraulic calculation of anti-mudflow structure with a bottom grating to extinguish the kinetic energy of non-cohesive debris flow to transform it into an ordinary silt-carrying flow</b> <i>Natishvili O., Gavardashvili G.</i>
<b>Fuchs</b>	Sven	<b>Impact forces of torrential floods on exposed buildings</b> <i>Fuchs S., Sturm M., Keller F., Mazzorana B., Papathoma-Köhle M., Aufleger M., Gems B.</i>
<b>COFFEE BREAK 10:53-11:15</b>		
<b>A2. DEBRIS FLOW RISK REDUCTION: FROM SCIENCE TO PRACTICE AND INTERNATIONAL COLLABORATION</b> <b>Conveners: Tovmasyan K., Gaprindashvili G.</b> <b>11:15-13:00</b>		
<b>Tovmasyan</b>	Kristine	<b>Using science for disaster risk reduction and enhanced international cooperation: gaps and challenges</b> <i>Tovmasyan K.</i>
<b>Strom</b>	Alexandr	<b>A roadmap for cooperation on slope process-related disaster in Central Asia</b> <i>Strom A.</i>
<b>Gaprindashvili G.</b>	George	<b>Geocological condition of Tbilisi city and debris/mudflow hazard risk</b> <i>Tsereteli E., Gaprindashvili G., Gaprindashvili M., Kurtsikidze O.</i>
<b>Su</b>	Fenghuan	<b>Debris flow hazards along the China-Pakistan highway in Xinjiang territory</b> <i>Su F., Ge Y.</i>
<b>Kayumov</b>	Abdulhamid	<b>Prospects and ways of cooperation on the study of breakthrough glacial lakes and the development of adaptation measures to reduce damage at the national and regional levels</b> <i>Kayumov A.</i>
<b>Zinevich</b>	Yuriy	<b>Designing and building of mudflow protection dams in Kazakhstan. The present stage 2008-2018</b> <i>Bakarasova T., Zinevich Yu., Khozhanazarov Ye.</i>
<b>GROUP PHOTO 01.10.2018 13:00-13:15</b>		
<b>LUNCH BREAK 13:15-14:30</b>		



Last name	First name	Title of presentation
<b>OCTOBER 1, 2018</b>		
<b>A3. DEBRIS FLOWS AND CLIMATE</b> <b>Conveners: Jomelli V., Yafyazova R.</b> <b>14:30-16:00</b>		
<b>Jomelli</b>	Vincent	<b>Respective influence of environmental and climate conditions on debris-flow occurrence in the northern French Alps</b> <i>Jomelli V., Eckert N., Pavlova I., Giacona F.</i>
<b>Sokratov</b>	Sergey	<b>The debris flow risk in Russia in the middle and the end of the XXI century</b> <i>Sokratov S., Derkacheva A., Khismatullin T., Shnyparkov A.</i>
<b>Li</b>	Yumei	<b>The meteorological warning method of China geological disasters induced by precipitation</b> <i>Li Yu., Li W., Di J., Zhang G., Bao H.</i>
<b>Seinova</b>	Irina	<b>The approbation of debris flows forecast methodology for the glacial region of Central Caucasus</b> <i>Seinova I., Andreev Y., Krylenko I., Bogachenko E., Feoktistova I.</i>
<b>Nikolova</b>	Nina	<b>Possible impact of climate and weather condition on debris flows occurrence (on the example of Kresna gorge, Bulgaria)</b> <i>Nikolova N., Rachev G., Kenderova R.</i>
<b>COFFEE BREAK 16:00-16:15</b>		
<b>A4. DEBRIS FLOW DISASTERS</b> <b>Conveners: Wei F., Garankina E.</b> <b>16:15-18:00</b>		
<b>Genevois</b>	Rinaldo	<b>The debris flow generated by the Stava (Northern Italy) tailing pond dam break</b> <i>Genevois R., Tecca P.</i>
<b>Keilig</b>	Klaus	<b>Geological and geotechnical findings of the catastrophic debris flow near Tskneti, Georgia, June 2015</b> <i>Neumann P., Bauer M., Haidn M., Keilig K., Menabde Z., Dumbadze D.</i>
<b>Hu</b>	Kaiheng	<b>Potential danger of dammed lakes induced by the 2017 Ms6.9 Milin earthquake in the Tsangpo gorge.</b> <i>Hu K., Zhang X., Tang J., Liu W.</i>
<b>Petrakov</b>	Dmitry	<b>The outburst of Bashkara glacier lake (Central Caucasus, Russia) on September 1, 2017</b> <i>Chernomorets, S., Petrakov D., Aleynikov A., Bekkiev M., Viskhadzhieva, K., Dokukin M., Kalov R., Kidyaeva V., Krylenko V., Krylenko I., Krylenko I., Rets E., Savernyuk E., Smirnov A.</i>
<b>Garankina</b>	Ekaterina	<b>Geomorphic and dendroecological affects of 2017 debris flow in the Sengisook Valley, Western Lovozerskiye Tundry, Northwestern Russia</b> <i>Garankina E., Belyaev V., Bondar A., Romanenko F., Rudinskaya A., Shishkina Y.</i>
<b>Concert of the choir and dance group of the Georgian Technical University for participants of the conference</b> <b>18:00-19:00</b>		



Last name	First name	Title of presentation
<b>OCTOBER 2, 2018</b>		
<b>B1. DEBRIS FLOW MITIGATION AND MONITORING</b> Convener: Strom A. 09:00-11:00		
<b>Matsiy</b>	Sergey	<b>Debris flow risk assessment and management</b> <i>Matsiy S., Sukhlyayeva L., Lesnoy V.</i>
<b>Koschuch</b>	Richard	<b>Pulse-doppler RADAR-system for Alpine mass movement monitoring</b> <i>Koschuch R.</i>
<b>Zhang</b>	Shaojie	<b>An experimental evaluation of impact force on a Fiber Bragg Grating-based device for warning dangerous level of debris flow</b> <i>Zhang S., Chen J.</i>
<b>Bogdanov</b>	Ivan	<b>Experience in the design and operation of mudflow and mudflow control structures at the facilities of the Western Caucasus</b> <i>Bogdanov I., Aleksandrov P.</i>
<b>Hofmann</b>	Helen	<b>Multi-level flexible debris flow barrier: case study in Peru</b> <i>Wendeler C., Salzmann H., Feiger N., Hofmann H.</i>
<b>Chen</b>	Long	<b>Discussion on the characteristics and calculation method of material source for the debris flow in Tian Mo Gully</b> <i>Chen L., Wang J., Li Y., Jiu J., Shi S.</i>
<b>Baljyan</b>	Pargev	<b>The prediction of surface position of sediments in the upper bay of mudflow protection structures</b> <i>Baljyan P., Tokmajyan V., Baljyan V., Bayunts A.</i>
<b>B2. DEBRIS FLOW HAZARD ASSESSMENT</b> Conveners: Shnyparkov A., Kadetova A. 11:15-13:15		
<b>Malneva</b>	Irina	<b>Use of space weather indicators for operational forecast of mudflows</b> <i>Malneva I., Cherkesov A.</i>
<b>Talanov</b>	Yevgeniy	<b>Climatology of debris-flow forming precipitation in Caucasus: hypotheses and facts</b> <i>Talanov Ye.</i>
<b>Kondratieva</b>	Natalia	<b>Comparative assessment of mudflow activity in the geographical regions of the North Caucasus (from east to west and from north to south): by type, genesis and volume of removals</b> <i>Kondratieva N., Adzhiev A., Razumov V., Bekkiev M.</i>
<b>Rybchenko</b>	Artem	<b>Formation conditions and hazard analysis of debris flows in the Tunka ridge, Siberia, Russia</b> <i>Rybchenko A., Kadetova A., Kozireva E.</i>
<b>Su</b>	Pengcheng	<b>Regional danger assessment of debris flow and its engineering mitigation practice in Sichuan-Tibet highway (section of Luding-Kangding)</b> <i>Su P., Wei F., Sun Z., Li Y.</i>
<b>Kuksina</b>	Lyudmila	<b>Lahar danger of rivers in the territory of active volcanism in Kamchatka, Russia</b> <i>Kuksina L., Muravyev Ya., Marchenko E.</i>
<b>Shafiev</b>	Ganjalli	<b>Analysis of the state of outburst lakes along the Gunt River valley in the South-Western Pamirs</b> <i>Shafiev G.</i>
<b>Petrushina</b>	Marina	<b>Landscape dynamics in the zone of debris flow release in 2017 in the Elbrus region</b> <i>Petrushina M.</i>
<b>COFFEE BREAK 11:00-11:15</b>		





Last name	First name	Title of presentation
<b>OCTOBER 2, 2018</b>		
<b>B3. MODELLING OF DEBRIS FLOWS AND FLOODS</b> <b>Conveners: Bartelt P., Kidyaeva V.</b> <b>14:45-16:15</b>		
<b>Kurovskaya</b>	Viktoria	<b>Modeling of unsteady water movement on the example of debris flows and flash floods</b> <i>Kurovskaya V., Vinogradova T.</i>
<b>Semakova</b>	Eleonora	<b>Remote sensing techniques and numerical simulation of debris flows in the Akhangaran and Tegermech rivers basins, using RAMMS software</b> <i>Semakova E., Alimov Yo., Sichugova L., Semakov D., Graf C.</i>
<b>Vinogradova</b>	Tatyana	<b>Calculation of the characteristics of catastrophic floods in the basins of the rivers of the Black Sea coast of the Krasnodar region</b> <i>Vinogradova T., Makarieva O.M., Vinogradov A., Nesterova N.</i>
<b>Gergokova</b>	Zaina	<b>The debris flow speed determining methods</b> <i>Sherkhov A., Gegiev K., Gergokova Z.</i>
<b>Sokolova</b>	Daria	<b>Assessment of dynamic characteristics of debris flow</b> <i>Sokolova D.P., Vinogradova T.A., Ostashov A.A.</i>
<b>Kidyaeva</b>	Vera	<b>Modelling of the 1st September 2017 Bashkara lakes outburst</b> <i>Kidyaeva V., Petrakov D., Chernomorets S., Krylenko I., Aleynikov A., Stoffel M., Graf C.</i>
<b>B4. DEBRIS FLOW FORMATION IN DIFFERENT CONDITIONS</b> <b>Conveners: Talanov E., Kozireva E.</b> <b>11:15-13:00</b>		
<b>Rudinskaya</b>	Anna	<b>Debris flow phenomena in the Lovozerskiye Tundry</b> <i>Rudinskaya A., Belyaev Y., Gurinov A., Garankina E.</i>
<b>Zhang</b>	Jiajia	<b>Conditions and mechanism for formation of glacial debris flows in Parlun Zangbo, SE Tibetan Plateau</b> <i>Zhang J., Liu J., Li Y., Wang J., Chen L., Gao B.</i>
<b>Tokmajyan</b>	Hovhannes	<b>About the methodology of assessment of damage caused by mudflow action</b> <i>Markosyan A., Tokmajyan H., Hayrapetyan V., Ivanyan G.</i>
<b>Kazakov</b>	Nikolay	<b>Phase transformations in debris flow geosystem</b> <i>Kazakov N.</i>
<b>Kherkheulidze</b>	Georgi	<b>Traditions of mudflow studies in the Institute of Hydrometeorology of Georgian Technical University (assessments, prospects)</b> <i>Kherkheulidze G.</i>
<b>Karavaev</b>	Vadim	<b>Debris flow activity on the northern slope of the greater Caucasus and morphometry of relief</b> <i>Karavaev V., Seminozhenko S.</i>
<b>Ayrapetyan</b>	Vrezh	<b>Features of the formation of river-bed for the Tartar River</b> <i>Tokmajyan O., Sarkisyan V., Ayrapetyan V., Eroyan E.</i>
<b>Malneva</b>	Irina	<b>Modern problems of forecasting mudslides in Georgia and in adjacent territories</b> <i>Malneva I., Kononova N.</i>
<b>LUNCH BREAK 13:15-14:30</b>		
<b>B5. REGIONAL ANALYSIS OF DEBRIS FLOWS</b> <b>Conveners: Sokratov S., Pryakhina G.</b> <b>14:30-15:45</b>		
<b>Kovalenko</b>	Nikolay	<b>Fast changes of the source area of catastrophic debris flows in Kolka Glacier cirque (Central Caucasus)</b> <i>Kovalenko N., Aristov K., Petrakov D., Kolchin A., Timonin S.</i>
<b>Bartelt</b>	Perry	<b>Thermomechanical analysis of a large rock/ice avalanche to resolve the cause of subsequent debris flows</b> <i>Bartelt P., Buser O.</i>



Last name	First name	Title of presentation
<b>OCTOBER 2, 2018</b>		
<b>Popov</b>	Sergey	<b>Dangerous hydrological phenomenas near the infrastructure of the “Progress” station, East Antarctica, in 2017-2018</b> <i>Popov S., Boroniva A., Pryakhina G.</i>
<b>Chernous</b>	Pavel	<b>Slushflow release forecasting</b> <i>Chernous P., Volkov A., Sokolova D.</i>
<b>Shnyparkov</b>	Alexandr	<b>Debris flow hazard for the transport communications of the Eastern Siberia and the Far East</b> <i>Shnyparkov A., Derkacheva A., Khismatullin T., Sokratov S.</i>
<b>Zelepukina</b>	Yelena	<b>Prerequisite for enhanced mudflow activity in West Sayan Mountains</b> <i>Zelepukina E., Pryakhina G., Gavrilkina S.</i>
<b>COFFEE BREAK 15:45-16:00</b>		
<b>B6. WHERE NEXT? MODELLING FUTURE LAKES FOR RISK MANAGEMENT AND DECISION-MAKING</b> <b>Convener: Shakhgedanova M.</b> <b>16:00-17:30</b>		
<b>Shahgedanova</b>	Maria	<b>Projections of the development of future glacial lakes in Central Asia and in the Caucasus using GlabTop2 model</b> <i>Kapitsa V., Shahgedanova M., Machguth H., Severskiy I., Medeu A.</i>
<b>Kapitsa</b>	Vasiliy	<b>Discussion in groups using examples from different regions and focusing on data transfer to stakeholders and its implementation in practice</b>





Last name	First name	Title of presentation
<b>OCTOBER 2, 2018</b>		
<b>B7. POSTER SESSION 17:30-18:15</b>		
<b>Dekayir</b>	Abdelilah	<b>Geomorphological and geological analysis of Akchour landslide in Rif Mountain, Morocco</b> <i>Harmouzi H., Dekayir A., Rouai M.</i>
<b>Frühwirth</b>	Sandra	<b>Debris flow simulation from hazard events near Akhaldaba</b> <i>Frühwirth S., Otto J.-C., Haidn M.</i>
<b>Haidn</b>	Markus	<b>Geological and geotechnical findings of the catastrophic debris flow near Tskneti, Georgia, June 2015</b> <i>Neumann P., Bauer M., Haidn M., Keilig K., Menabde Z., Dumbadze D.</i>
<b>Keilig</b>	Klaus	<b>How to effectively monitor geomorphic changes in debris flow channels</b> <i>Keilig K., Dietrich A., Krautblatter M.</i>
<b>Nagl</b>	Georg	<b>Monitoring barrier for debris flow/structure/ground interaction</b> <i>Nagl G., Kaitna R., Hübl J.</i>
<b>Raimbekov</b>	Yusuf	<b>The results of the bathymetric studies of the outbursting lakes in the area of Gorno Badakhshan Autonomous Oblast, Tajikistan</b> <i>Raimbekov Y., Pirmamadov U., Marodaseynov F., Zikillobekov I., Gulomaydarov A., Bobov R., Chernomorets S., Savernyuk E., Kidyayeva V.</i>
<b>Schimmel</b>	Andreas	<b>Automatic identification of debris flows by a combination of seismic and infrasound signals</b> <i>Schimmel A., Hübl J.</i>
<b>Tielidze</b>	Levan	<b>Rock-Ice Flows History onto Devdoraki Glacier, Georgian Caucasus</b> <i>Tielidze L., Kumladze R., Wheate R., Gamkrelidze M.</i>
<b>Yefremov</b>	Yuriy	<b>Actions for protection of infrastructure against mudflows of Western Caucasus (in the Lagonaki Highlands)</b> <i>Efremov Yu., Shulyakov D.</i>
<b>Khismatullin</b>	Timur	<b>Debris flows on the Matua Island</b> <i>Khismatullin T., Shnyparkov A.</i>
<b>Bobrova</b>	Darya	<b>The role of the debris flow pass construction in mouth part of debris flow rivers of Sakhalin Island</b> <i>Kazakova E., Bobrova D.</i>
<b>Fan</b>	Jianrong	<b>Assessment and analysis of the freeze-thaw erosion sensitivity in the Tibet of China</b> <i>Fan J., An. C.</i>
<b>Kazakova</b>	Ekaterina	<b>Debris flow engineering protection on Sakhalin Island</b> <i>Kazakova E., Kazakov N., Gensiorovskiy Yu.</i>
<b>Rybalchenko</b>	Svetlana	<b>An integrated approach to the creation of the engineering protection against debris flow processes on marine terraces of the Sakhalin island</b> <i>Rybalchenko S., Verkhovov K.</i>
		<b>The difference of slope debris flows from other exogenous processes</b> <i>Rybalchenko S., Verkhovov K.</i>
		<b>The motion of the solid phase in a turbulent debris flow</b> <i>Verkhovov K., Rybalchenko S.</i>
<b>Xie</b>	Hong	<b>Engineering control of debris flow in Luding County New Town, Hengduan Mountains Area, China</b> <i>Xie H., Li Y., Wang S., Zhang J., Yu B.</i>
<b>Kenderova</b>	Rossitza	<b>Analysis of debris flows by application of GIS and remote sensing: case study of western foothills of Pirin Mountains (Bulgaria)</b> <i>Baltakova A., Nikolova V., Kenderova R., Hristova N.</i>
<b>Kotenko</b>	Tatiana	<b>The 4 September 2017 rain mudflows in the northern part of Paramushir Island, the Kuril Islands</b> <i>Kotenko T., Kotenko L.</i>



Last name	First name	Title of presentation
<b>OCTOBER 2, 2018</b>		
<b>Raimbekov</b>	Yusuf	<b>Results of bathymetric surveys for outburst-hazardous lakes in Gorno-Badakhshan Autonomous Region, Tajikistan</b> <i>Pirmamadov U., Raimbekov Y., Marodasenov F., Zikillobekov I., Gulomaidarov A., Bobov R., Chernomorets S., Kidyaeva V., Savernyuk E.</i>
<b>Savernyuk</b>	Elena	<b>The Devdorak ice-rock avalanche and consequent debris flow from the slope of Mt. Kazbek (Caucasus, Georgia) in 2014</b> <i>Chernomorets S., Savernyuk E., Petrakov D., Dokukin M., Gotsiridze G., Gavardashvili G., Drobyshev V., Tutubalina O., Zaporozhchenko E., Kamenev N., Kamenev V., Käab A., Kargel J., Huggel C.</i>
<b>B8. MEETING FOR MEMBERS OF THE PRESIDIU OF DEBRIS FLOW ASSOCIATION AND OF THE ORGANIZING COMMITTEE</b> <b>17:30-18:30</b>		
<b>GALA-DINNER 19:00</b>		

Last name	First name	Title of presentation
<b>OCTOBER 3, 2018</b>		
<b>Husani Bobov</b>	Hadi Ruslan	<b>Special announcement</b> <b>09:00-09:15</b>
<b>C.1 METHODS AND RESULTS OF DEBRIS FLOW INVESTIGATIONS</b> <b>Convener: Ranova S.</b> <b>9:15-11:00</b>		
<b>Nanitashvili</b>	Manana	<b>Origin and classification of debris flows</b> <i>Nanitashvili M., Gurgenidze D., Inashvili I.</i>
<b>Rouai</b>	Mohamed	<b>On power-law size distributions of landslides</b> <i>Rouai M., El Kharim Y.</i>
<b>Boynagryan</b>	Vladimir	<b>Risk of debris flow forming in Armenia</b> <i>Boynagryan V.R.</i>
<b>Supatashvili</b>	Tamriko	<b>Forecasting colloidal fractions value transported by floods on the example of Duruji Basin</b> <i>Supatashvili T., Kupreishvili Sh., Sichinava P., Shavlakadze M., Dadiani K., Kiknadze K., Maisaia I.</i>
<b>Nepop</b>	Roman	<b>Debris flows in mountain framing of the Boguty depression, SE Altai: analysis of the landscape climatic factors and triggers</b> <i>Nepop R., Agatova A.</i>
<b>Nesterova</b>	Natalia	<b>Deterministic mathematical modeling method for estimation of instant water discharges at small mountain catchments (by the example of streams at the "Kolyma" federal highway)</b> <i>Makarieva O., Nesterova N., Pashovkina A., Sokolova D.</i>
<b>Stupin</b>	Vladimir	<b>Geoinformation system mapping of debris flow hazard</b> <i>Stupin V.P., Plastinin L. A., Olzoev B. N., Kotelnikova N.V.</i>
<b>COFFEE BREAK 11:00-11:15</b>		
<b>C2. METHODS AND RESULTS OF DEBRIS FLOW INVESTIGATIONS</b> <b>Conveners: Kazakov N., Vinogradova T.</b> <b>11:15-13:00</b>		



Last name	First name	Title of presentation
<b>OCTOBER 3, 2018</b>		
<b>Garankina</b>	Ekaterina	<b>Debris flows as land sculpturing agent of modern valleys at the Kola peninsula low mountains, northwestern Russia</b> <i>Garankina E., Belyaev V., Belyaev Y., Gurinov A., Ivanov M., Kuzmenkova N., Romanenko F., Rudinskaya A., Surkov V., Tulyakov E.</i>
<b>Strom</b>	Alexandr	<b>Reconstruction of debris floods caused by breach of the prehistoric rockslide dams in Central Asia and assessment of their parameters</b> <i>Strom A.L., Zhirkevich A.N.</i>
<b>Viskhadzhieva</b>	Karina	<b>Geomorphological conditions for the formation of outburst floods in the Tien Shan and Hindukush Mountains</b> <i>Viskhadzhieva K., Chernomorets S., Savernyuk E., Dokukin M., Petrov M.</i>
<b>Dokukin</b>	Mikhail	<b>Debris flows 14 and 15 August, 2017 in the basin of Gerhozh-Su river (Central Caucasus): conditions and causes of formation, dynamics, consequences</b> <i>Dokukin M., Anaev M., Bekkiev M., Bogachenko E., Zaporozhchenko E., Kalov R., Savernyuk E., Chernomorets S., Khadjiev M., Khatkutov A.</i>
<b>Znamensky</b>	Dimitry	<b>Brazilian tropical residual soils as solid phase sources of mud and debris flows induced by heavy rains</b> <i>Znamensky D.V.</i>
<b>Romanenko</b>	Fedor	<b>Debris flows on the islands and coasts of the arctic seas</b> <i>Romanenko F.</i>
<b>LUNCH BREAK 13:00-14:30</b>		
<b>C3. METHODS AND RESULTS OF DEBRIS FLOW INVESTIGATIONS</b> Conveners: Kalov R., Kondratieva N. <b>14:30-16:00</b>		
<b>Khismatullin</b>	Timur	<b>Debris flows on the Matua Island</b> <i>Khismatullin T., Shnyparkov A.</i>
<b>Kazakov</b>	Nikolay	<b>Multiple debrisflows in the lowlands of the Sakhalin Island: conditions and repeatability</b> <i>Kazakov N.</i>
<b>Fazylov</b>	Ali	<b>The debris flows hazard of the river Varzob Basin (Tajikistan)</b> <i>Fazilov A., Niyazov J., Saidov M., Talanov E.</i>
<b>Makarova</b>	Marina	<b>Mountain ecosystems of Zhupanovsky Volcano (Kamchatka Peninsula, Russia) and their transformation under the influence of eruptions in 2013-2017</b> <i>Makarova M., Dirksen V., Vladimirova N., Dirksen O.</i>
<b>Lukashov</b>	Andrey	<b>Seismicity and debris flow relationship in Khibiny low mountains, Kola Peninsula, Russia</b> <i>Lukashov A., Garankina E.</i>
<b>COFFEE BREAK 15:45-16:00</b>		
<b>DISCUSSION AND RESOLUTION</b> Conveners: Chernomorets S., Gavardashvili G. <b>16:00-17:00</b>		
<b>Awarding Fleishman medals to laureates</b> <b>CLOSING CEREMONY</b> <b>17:00-17:30</b>		



## Field Workshop (October 4-5, 2018)

The field workshop will be held on October 4-5, 2018 in Kakheti region (Telavi and Kvareli) and along the Georgian Military Road (Kazbegi). Workshop will include two one-day trips, with the return to Tbilisi in the evening.

The air temperature in the mountains of Georgia in early October may vary from +10 to +25 degrees. The Organizing Committee recommends the participants of the workshop to wear trekking shoes or sneakers, and to have clothes in the case of both sunny and rainy weather.

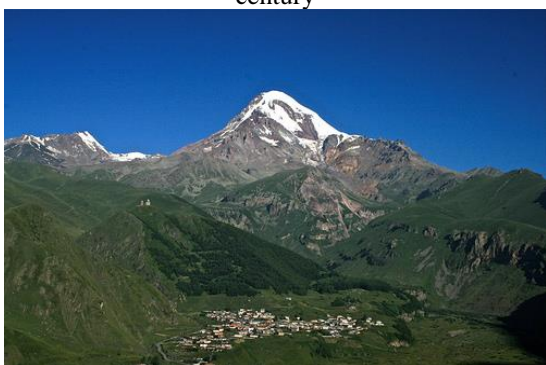
Buses will depart from the administrative building of GTU.



Kakheti region. St. George Cathedral (11<sup>th</sup> century) in Alaverdi Monastery established in 6<sup>th</sup> century



Protective dam destroyed by debris flows.  
Duruji River upstream of Kvareli town



Mt. Kazbek. Military Georgian Road area.



Debris flow catchments near Kvemo-Mleti village



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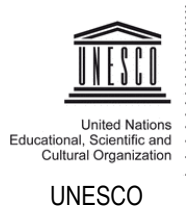
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