



Preface

This volume contains the Proceedings of the **6th conference "Debris Flows: Disasters, Risk, Forecast, Protection" (Dushanbe-Khorog, Tajikistan)**.

Debris flows in mountainous regions cause significant damage to the economy, and often lead to casualties among the population. To solve the debris flow problem, the cooperation of experts from different countries is required. One of the forms of such cooperation is the holding of conferences on "Debris Flows: Disasters, Risk, Forecast, Protection". The conference in Tajikistan is the sixth and continues the series of conferences under the indicated name, held in Pyatigorsk (2008), Moscow (2012), Yuzhno-Sakhalinsk (2014), Irkutsk and Arshan (2016), Tbilisi (2018).

The initiator of the conferences is the Debris Flow Association, founded in 2005 in Pyatigorsk. The Debris Flow Association continues the traditions established by the Commissions for the study of the Kazbek blockages in the 19th century and the Debris Flow Commission of the USSR Academy of Sciences, which worked from 1948 to the end of the 1980s. At present, the Debris Flow Association is the world's largest association of specialists in debris flows and debris flow protection, which includes more than 170 experts from 23 countries. The Debris Flow Association has professional awards – the Fleischman medals, which are awarded to outstanding scientists in the field of debris flow management. By the decision of the Debris Flow Association, since 2018, an annual professional holiday has been established - Selevik Day (Day of the Debris Flow Specialist), which is celebrated on July 19.

The conference in Tajikistan was organized by the Debris Flow Association, the National Academy of Sciences of Tajikistan and the Branch of the Aga Khan Agency for Habitat in the Republic of Tajikistan, with the participation of government departments of Tajikistan (Committee on Emergency Situations and Civil Defense under the Government of the Republic of Tajikistan, Committee on Environmental Protection under the Government of the Republic of Tajikistan, Main Department of Geology under the Government of the Republic of Tajikistan, Agency for Hydrometeorology of the Republic of Tajikistan), UNESCO, the Faculty of Geography of Lomonosov Moscow State University, the Aga Khan Development Network, the University of Central Asia, the High-Mountain Geophysical Institute of Roshydromet, the Scientific Research Center for Ecology and Environment of Central Asia (Dushanbe), the Chongqing Institute of Green and Intelligent Technologies and the Institute of Mountain Hazards and Environment of the Chinese Academy of Sciences, the Laboratory of Physical Geography of the CNRS (France), and the Swiss Agency for Development and Cooperation.

The conference is dedicated to the discussion of such issues as global and regional analysis of debris flows, debris flow disasters of recent years, debris flow risk and forecast, modeling, debris flow hazard of glacial lakes, the role of glacier movements in the formation of debris flows, debris flow protection measures, regulatory documents on forecasting debris flows and mitigation measures.

The conference was scheduled for September 2020, however, due to the epidemiological situation in the world, the Organizing Committee decided to postpone the conference until September 20-26, 2021. The conference venue is the National Library of Tajikistan (Dushanbe) and the University of Central Asia (Khorog). An important element of the international event is a field workshop with a visit to debris flow basins in Tajikistan.

Conference website: www.debrisflow.ru/en/df20.

Here we publish the **Volume 1** of the Proceedings of the conference. It includes 56 articles, the authors of which are experts from Australia, Austria, Azerbaijan, Brazil, Georgia, Italy, Kazakhstan, Kyrgyzstan, Pakistan, Russia, Tajikistan, Switzerland, and United Kingdom.

Titles of articles, surnames of authors, abstracts and key words are given in Russian and English, the main text is written in one of the indicated languages. The main information partner

of the conference is Geomarketing LLC, which publishes part of the articles selected by the Organizing Committee in the Georisk World journal (No. 2 and 3 for 2020).

The publications of the conference participants provide a state of the art in the theory and methods for debris flow studies. The publications are intended for decision-makers on debris flow mitigation, researchers, and practitioners. Also, the published materials can be used by university lecturers and students in the study of debris flow phenomena.

*Sergey Chernomorets
Karina Viskhadzhieva*

*Debris Flow Association
and
Lomonosov Moscow State University, Moscow, Russia*