

**“Geomorphology and Sustainability”
at the 17th Joint International Geomorphology Conference
(17–20 August 2004) in Glasgow, UK**

JAN KALVODA

Charles University in Prague, Faculty of Science, Prague, Czech Rep.

A joint International Geomorphology Conference organized by the British Geomorphological Research Group was one of the stimulated meetings at the 30th Congress of the International Geographical Union in Glasgow (15–20 August 2004). In addition, many sections of the scientific programme of the 30th IGU Congress involved topics related to priorities of the International Association of Geomorphologists. Therefore, it is very regrettable that active participation of the Czech physical geographers at the 30th IGU Congress, characterised by a slogan “One Earth – Many Worlds”, was very limited (comp. Enclosures 1 a 2).

The most interesting lectures and posters of physical geographers and geomorphologists were presented in the following core sessions of the 30th IGU Congress: Contemporary Climatology, Climatic Changes and Periglacial Environments, Marine Geography, Sustaining Water and the Water Environment, Fluvial System Research, Coastal Systems, Diversity in Mountain Systems, Land Degradation and Desertification, Karst, Biogeography and Biodiversity, Land Use/Cover Change, Global Change, Hazards and Risks. At minimum 6 out of 10 Academic Excursions have been arranged within the framework of physical geography and geomorphology: Iceland: Landscape and Environmental Change; Karst in Ireland: Geomorphology, Hydrology and Resource Management; Land Use and Rural Sustainability in Scotland; Loch Lomond, Glen Coe and Glen Roy; Geomorphology of the Cairngorms; Coastal Processes and Management in the Dornoch and Moray Firths.

The programme of the 17th Joint International Geomorphology Conference with the main theme “Geomorphology and Sustainability” was divided to four core sessions: Geomorphology and Instability, Geomorphology in a New Century, Past Hydrological Events and Global Change and The Managed Landscape and Restoring Nature. Moreover, plenary sessions were held with invited lecturers: Frost Lecture by Professor Tim Burt “Esensual geomorphology” (17. 8.), Linton Lecture by Professor David Sugden “The Antarctic ice sheet and its variable reponse to climate change” (18. 8.), Plenary Lecture by Professor Andrew Goudie “Dust in the global system” (19. 8.), Wiley Lecture by Dr. David Breshears “Comparing wind and water erosion and transport in dryland ecosystems: Toward a more integrated perspective (19. 8.) and Plenary Lecture by Professor Will Graf “Where the wild things are: river restoration and wildlife preservation” (20. 8.).

The core session “Geomorphic Instability” was divided to sessions about 1) Event-related and intrinsic instability and 2) Geomorphic response to environmental change: a) short-term and human-induced change, b) long-term changes (especially Pleistocene–Holocene environmental/climate change, neotectonics, etc.). The core

session "Geomorphology in the 21st Century" deals with main themes Scales in space and time, From continents to oceans, Deserts and neotectonics, Glacial and periglacial landforms and processes and Developments in dating techniques. Numerous presentations and posters of the core session "Past Hydrological Events and Global Change" were motivated by the effort for better understanding of fluvial aspects of global change. The core session "The Managed Landscape and Restoring Nature" was organized in the sessions Ethics and issues, Methods, Lessons from case studies and Lessons to learn.

Presented geomorphological contributions in all these core sessions indicate that an extraordinary effort is directed towards field observations, measurements and monitoring of landforms changes and the course of morphotectonic and climate-morphogenetic processes. However, research reports about these events and phenomena are very efficiently used for interpretations concerning a complex and evolving structure of geomorphic systems. These prevalingly regional interpretations on variable spacial and temporal scales are then a suitable basis for creation of models of the dynamics of geomorphic response to global change of the environment.

The indicated trends in dynamic and evolutionary geomorphology are also applied in the presented contributions of Czech geomorphologists. For this reason, we summarize these papers in the *Varia* (revue) section of the *AUC, Geogr., Suppl.* volume as a part of a report about the activities of the Czech Association of Geomorphologists in the year 2004. Further 14 geomorphological and physical geographical articles were published in the monographical book "Czech Geography at the Dawn of the Millennium" (2004) which was elaborated on the occasion of the 30th Congress of the International Geographical Union in Glasgow.

ENCLOSURE 1

**Resume of posters presented by Czech authors
at the 17th Joint International Geomorphology Conference (17–20 August 2004)
in the framework of the 30th Congress
of the International Geographical Union in Glasgow, UK**

ANDREW GOUDIE, JAN KALVODA: Recent geomorphological processes in the Nagar region, Hunza Karakoram

JAN KALVODA, JAN KOŠLER, MARTIN SVOJTKA: Morphotectonic evidence for chro-nodynamics of uplift in the East Nepal Himalaya

KAREL KIRCHNER: Geomorphologic aspects of slope deformations in the Outer Western Carpathians, Eastern Moravia, Czech Republic

PETRA ŠTĚPANČÍKOVÁ, JOSEF STEMBERK: Morphotectonic research of the Eastern Sudeten in the Czech Republic and monitoring of present-day tectonic movements

VÍT VILÍMEK, BLAHOŠLAV KOŠŤÁK, JOSEF STEMBERK, LUIGI PICCARDI, GIU-SEPPE CELLO, GIOVANNA MORATTI, EMANUELE TONDI: Monitoring of recent tectonic activity in Italy

ENCLOSURE 2

Abstracts of lectures presented by Czech authors at the physical geographical sessions of the 30th Congress of the International Geographical Union, 15–20 August 2004, Glasgow

JAKUB LANGHAMMER: Landuse changes as indicator of flood risk

VÍT VILÍMEK, JIŘÍ ZVELEBIL, JAN KLIMEŠ and FILIP HARTVICH: Geomorphological research at Machu Picchu

VÍT VOŽENÍLEK: Landslide database for modelling and landslide map production

References

Abstract volume of the Joint International Geomorphology Conference, 17–20 August 2004, 79 p., Glasgow, UK.

DRBOHLAV, D., KALVODA, J., VOŽENÍLEK, V. (Eds, 2004): Czech Geography at the Dawn of the Millennium. – Czech Geographic Society, Palacký University in Olomouc, 428 p., Olomouc.

One Earth – Many Worlds. – Programme of the 30th Congress of the International Geographical Union, 15–20 August 2004, 300 p., Glasgow, UK.