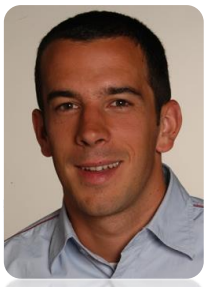
DR. MICHAEL KRAUTBLATTER



BIOGRAPHY

EDUCATION

PhD in Engineering Geology, University of Bonn, Germany, 2009; MSc in Geography, Geology and Economics, University of Erlangen, Germany, 2004.

PRESENT POSITIONS

- Vice Dean of the Faculty of Cicil Geo and Environmental Engineering, (2014-present)
- Dean of studies for Geosciences TUM (2013-present)
- W2-Professorship: Chair of Landslide Research, Technical University of Munich (2012-2017), Arcisstrasse 21, Munich, Germany, m.krautblatter@tum.de

EXPERTISE/CURRENT RESEARCH

Rock slope failure and permafrost-induced slope instability, engineering geology, natural hazards, landslide monitoring, rock mechanics

- Project "Georisks in a changing climate, Landslide hazard assessment in the Bavarian Pre-Alps" by the Bavarian Environmental Ministry;
- E.ON. project: Assessing, Monitoring, Geophysical Reconnaissance & Modelling of slope instability above a lake reservoir (Bavaria);
- GAP-Hazard " project. Process-model-based physical nowcasting (1-3h in advance) systems for mass movements, torrent control and coupled processes in high-alpine environments;
- ESA-Project: "Assessment of slow permafrost-controlled Alpine landslides using differential SAR interferometry over two decades";
- ISPR: Influences of snow cover on thermal and mechanical processes in steep permafrost rock walls;
- TRANSAFROST: Critical Thermo-Hydro-Mechanical Transitions in thawing permafrost rocks and soils;
- Carbon release from degrading permafrost in the western Canadian Arctic;
- Monitoring the thermal state of permafrost by automated time-lapse Capacitive Resistivity Imaging;
- Monitoring potential hazardous rock walls and slopes in mountain regions (MOREXPERT);
- Dangerous lakes - Hazard assessment and outburst flood estimation of naturally dammed lakes in Central Asia;

TECHNICAL–SCIENTIFIC ADVISORY SERVICES

Consulting for the National Department for Civil Protection (Rome, Italy):

- Over 20 invited talks and guest lectures, 3 of which have been awarded prestigious scientific awards
- Teaching over 12 courses at TUM, 4 of which have been awarded and over 20 courses at University of Bonn
- Supervised 11 PhD theses and over 30 MSc/BSc theses
- Convened over 10 sessions at prestigious international conferences
- Published over 20 ISI papers

EDITORIAL WORK (INTERNATIONAL SCIENTIFIC JOURNALS)

- Associate Editor Earth Surface Processes and Landforms (Wiley, i.-f. 2.5, special issue rock slope instability & erosion), Earth Surface Dynamics (EGU – Copernicus) and Geomorphology
- Member of the Editorial Board of the journal *Engineering Geology* (Elsevier) (2007-present)
- Reviewer for: Geophysical Research Letters, Geophysics, Geomorphology, The Holocene, Earth Surface Processes and Landforms, Geology, Near Surface Geophysics, Geografiska Annaler, Permafrost and Periglacial Processes, Natural Hazards and Earth System Science (NHESS), The Cryosphere, Zeitschrift für Geomorphologie, Swiss Journal of Geosciences, Cold Regions Science and Technology, NERC (Natural Environment Research Council, DFG-equivalent in the UK)

INVITED LECTURE

Anticipating rock slope failure in high mountain environments

TOP 5 PUBLICATIONS SELECTED BY LECTURER

Krautblatter, M. and Dräbing, D. (2014). Pseudo 3D - P-wave refraction seismic monitoring of permafrost in steep unstable bedrock. J. Geophys. Res. – Earth Surface VOL. 118, 1–13. (i.-f. 3.4) http://dx.doi.org/10.1002/2012JF002638

Krautblatter, M., Huggel, C., Deline P. and Hasler A. (2012): Research perspectives for unstable high-alpine bed¬rock permafrost: measurement, modelling and process understanding. Perm. and Periglac. Process. (i.-f. 2.2) http://dx.doi.org/10.1002/ppp.740

Krautblatter, M., Verleysdonk, S., Flores-Orozco, A. and Kemna, A. (2010). Temperature-calibrated imaging of seasonal changes in permafrost rock walls by quantitative electrical resistivity tomography (Zugspitze, German/Austrian Alps). J. Geophys. Res. - Earth Surface. (i.-f. 3.2) http://dx.doi.org/10.1029/2008JF001209

Krautblatter, M. and Moore, J. (2014). Rock slope instability and erosion: toward improved process understanding. Earth Surface Process. Landforms –Special Issue Review Paper / Editorial for special issue with 17 papers. (i.-f. 2.5) http://dx.doi.org/10.1002/esp.3578

Krautblatter, M., Verleysdonk, S., Flores-Orozco, A. and Kemna, A. (2010). Temperature-calibrated imaging of seasonal changes in permafrost rock walls by quantitative electrical resistivity tomography (Zugspitze, German/Austrian Alps). J. Geophys. Res. - Earth Surface. (i.-f. 3.2) http://dx.doi.org/10.1029/2008JF001209

Krautblatter, M. and Moser, M. (2009): A nonlinear model coupling rockfall and rainfall intensity based on a four year measurement in a high Alpine rock wall (Reintal, German Alps). In: Nat. Haz.Earth Syst. Sci. 9: 1425–1432. (i.-f. 1.8) http://dx.doi.org/10.5194/nhess-9-1425-2009