Part I Progress of IPL Activities

1 Progress of the International Programme on Landslides (IPL) – Objectives of the IPL and the World Landslide Forum .......................... 3
   Kyoji Sassa

2 Projects of International Programme on Landslides ...................... 15
   Nicola Casagli, Giacomo Falorni and Veronica Tofani

Part II Keynote Lectures

3 Landslide Risk Assessment and Mitigation Strategy ......................... 31
   Suzanne Lacasse and Farrokh Nadim

4 Understanding to Predict .......................................................... 63
   Luciano Picarelli

5 Mechanics-Based Approach Toward the Mitigation of Debris Flow Disasters ......................................................... 89
   Tamotsu Takahashi

6 Submarine Mass Movements and Their Consequences: An Overview ........................................................................ 115
   Jacques Locat and Homa Lee

7 Satellite Remote Sensing Applications for Landslide Detection and Monitoring ....................................................... 143
   Vern Singhroy

8 Huge Landslides Caused by Massive Earthquakes and Long-Lasting Geotechnical Risks .................................................... 159
   Konagai Kazuo, Johansson Jorgen, Takatsu Shigeiki and Ikeda Takaaki

9 The Increasing Wildfire and Post-Fire Debris-Flow Threat in Western USA, and Implications for Consequences of Climate Change .............................................. 177
   Susan H. Cannon and Jerry DeGraff
10 Recovery of the Buddha’s Niches and Cliff in Bamiyan (Central Afghanistan) after the Taliban Destruction of 2001 .......................... 191
C. Margottini

Part III Achievements of IPL Projects

11 Assessment of Global High-Risk Landslide Disaster Hotspots .......... 213
Farrokh Nadim and Oddvar Kjekstad

12 International Summer School on Rockslides and Related Phenomena in the Kokomeren River Valley, Tien Shan, Kyrgyzstan ................................................................. 223
Alexander L. Strom and Kanatbek E. Abdrakhmatov

13 Landslide Investigation and Capacity Building in the Machu Picchu – Aguas Calientes Area (IPL C101-1) .................................................. 229
Kyoji Sassa, Hiroshi Fukuoka and Raul Carreno

14 Monitoring, Geomorphological Evolution and Slope Stability of Inca Citadel of Machu Picchu: Results from Italian INTERFRASI project ...................................................... 249

15 Dilatometric and Extensometric Monitoring of Rock Blocks Displacements Within Machu Picchu Archaeological Site, Peru .......................................................... 259
Vít Vílímek, Jan Klimes, Jiří Zvelebil and Fernando V. Astete

16 Geophysical Surveys at Machu Picchu, Peru: Results for Landslide Hazard Investigations ........................................................................... 265
Melvyn Best, Peter Bobrowsky, Marten Douma, Victor Carlotto and Walter Pari

17 Integration of VHR Satellite Images with Field Data for the Analysis of Debris Sheet Instability in the Machu Picchu Area ....... 275
Nicola Casagli, Riccardo Fanti and Gaia Righini

Part IV Parallel Sessions

Global Cooperation Field (1): Technological Development

18 A Look from Space ................................................................. 287
Nicola Casagli, Veronica Tofani and Robert F. Adler

19 Mapping: Inventories, Susceptibility, Hazard and Risk ..................... 321
Javier Hervás and Peter Bobrowsky

20 Monitoring, Prediction and Early Warning ......................................... 351
Kyoji Sassa, Luciano Picarelli and Yue Yueping

Global Cooperation Field (2): Targeted Landslides: Mechanism and Impacts

21 Catastrophic Slides and Avalanches .............................................. 379
Alexander L. Strom
<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>22</td>
<td>Cultural Heritage and Landslides: Research for Risk Prevention and Conservation</td>
<td>Paolo Canuti, Claudio Margottini, Riccardo Fanti and Edward N. Bromhead</td>
</tr>
<tr>
<td>23</td>
<td>Landslides and Multi-Hazards</td>
<td>Hideaki Marui and Farrokh Nadim</td>
</tr>
<tr>
<td>24</td>
<td>Rainfall, Debris Flows and Wildfires</td>
<td>Jerome V. DeGraff and Hirotaka Ochiai</td>
</tr>
<tr>
<td></td>
<td><strong>Global Cooperation Field (3): Capacity Building</strong></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>Case Studies and National Experiences</td>
<td>Srikantha Herath and Yi Wang</td>
</tr>
<tr>
<td>26</td>
<td>Education, Capacity Building and Public Awareness for Disaster Reduction</td>
<td>Rajib Shaw, Yukiko Takeuchi and Badaoui Rouhban</td>
</tr>
<tr>
<td>27</td>
<td>International Cooperation Initiatives</td>
<td>Wolfgang Eder, Kaoru Takara and Fawu Wang</td>
</tr>
<tr>
<td></td>
<td><strong>Global Cooperation Field (4): Mitigation, Preparedness and Recovery</strong></td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>Climate Change and Slope Instability</td>
<td>John J. Clague</td>
</tr>
<tr>
<td>30</td>
<td>Economic and Social Impacts of Landslides</td>
<td>Oddvar Kjekstad and Lynn Highland</td>
</tr>
<tr>
<td>31</td>
<td>Environmental Impact of Landslides</td>
<td>Marten Geertsema, Lynn Highland and Laura Vaugeouis</td>
</tr>
<tr>
<td>32</td>
<td>Engineering Measures for Landslide Disaster Mitigation</td>
<td>Mihail E. Popescu and Katsuo Sasahara</td>
</tr>
<tr>
<td>33</td>
<td>Watershed and Forest Management for Landslide Risk Reduction</td>
<td>Nicolas Dolidon, Thomas Hofer, Libor Jansky and Roy Sidle</td>
</tr>
</tbody>
</table>
Landslides - Disaster Risk Reduction
Sassa, K.; Canuti, P. (Eds.)
2009, XVIII, 650 p.,
ISBN: 978-3-540-69970-5