Progress Report Form of WCoEs 2014

3 June 2014 to 31 December 2014

1. Short Title of WCoE

Risk identification and land-use planning for disaster mitigation of landslides

2. Name of Institution (Name of leader and email) Niigata University/ Research Institute for Natural Hazards and Disaster Recovery

3. List of core members Hiroshi FUKUOKA, prof. / Niigata Univ.
Hideaki MARUI, adjunct prof. / prof. emeritus / Niigata Univ.
Hiroshi KAWABE, prof. / Niigata University
Naoki WATANABE, associate prof. / Niigata University
Chunxiang WANG, adjunct associate prof. / Niigata University

4. Progress report of activities up to 31 December 2013 (up to 30 lines)

Niigata University was awarded WCoE for the second time at the WLF3 in June, in Beijing. Certificate was handed by Irina Bokova, DG of UNESCO, which was celebrated by the University president and announced by the university web site.

1) Field investigation of landslides which took place in 2014 in Japan; (a) July 2014 Nagisotown of Nagano prefecture debris flow disaster which claimed 1 casualties, (b) August 2015 Hiroshima city debris flow disaster which claimed 74 casualties, (c) landslides induced by the 22 November 2014 northern Nagano earthquake.

2) Advanced dynamic simulation method for estimation of landslide movement was developed and applied for target areas such as (a) August 2014 Hiroshima debris flow disaster, (b) March 2014 Oso, Washington State, US debris flow. Geochemistry approach to the deep groundwater was conducted to understand the initiation mechanism of gigantic deep-seated landslides around Niigata, highly tectonically active zone.

3) Promoted IPL-161 “Risk identification and land-use planning for disaster mitigation of landslides and floods in Croatia.” Comprehensive observation of landslide movement and related factors was continued in target landslide areas of Grohovo landslide area and Kostanjek landslide area in Croatia.
4) Study on mechanism of submarine landslides: Geotechnical study on the possible initiation mechanism associated with dissociation of methane hydrates, was conducted funded by AIST. Rate effect and behaviours of cyclic loading on the mixture of silica sands and methane hydrate substitute materials.

5) Organization of landslide sessions in AGU and EGU 2014: Rain-induced landslide session and earthquake- or volcanic activity-induced landslides session of EGU GA (European Geosciences Union General Assembly) 2014 and landslide mechanism session of AGU FM (American Geophysical Union Fall Meeting) 2014 was convened or co-convened by Fukuoka.

6) Fukuoka contributed to JICA's activities on landslide risk reduction: Gave lectures at classes for national disaster risk reduction officers from countries of (a) Central Asia, (b) Central Americas, (c) South-east Asia.

7) Marui played the chairperson role in the organization of the international conference "INTERPRAEVENT" 2014 in Nara, from 25 – 28 November 2014 which attracted about 200 participants. Marui and Wang convened sessions of the IAEG World Congress in Trino, Italy in October 2014.

8) Fukuoka contributed to organizing a symposium of the Kansai regional branch of the Japan Landslide Society, titles as "overseas development of Japanese landslide technology."

5. Plan of future activities (up to 30 lines)

1) Most of the current activities listed above in the report section will be continued.

2) The International symposium on Landslides Disaster Mitigation will be organized on 20 March 2015 after the ICL's BOR and UN WCDRR session to exchange recent information.

3) Future target areas will be expanded from the targeted areas during the past three years. Research results through the past activities should be applied also for new enlarged areas.

6. Publication (in Landslides, proceedings, meeting reports, or WEB)


Chunxiang Wang, Snjezana Mihalić Arbanas, Hideaki Marui, Naoki Watanabe, Gen Furuya (2014):
Shallow Landslide Susceptibility Mapping for Zagreb Hilly Area, Croatia. Landslide Science for a Safer Geoenvironment, pp 527-531.


Note:
Please fill and submit this form by 1 March 2015 to ICL Network <icl-network@iclhq.org>

Less than 2 printed pages.

Activities are recommended to submit to the ICL-IPL activities of Landslides: Journal of International Consortium on Landslides.