United Nations
Educational, Scientific and
Cultural Organization

UNESCO Chair on the Prevention and
Sustainable Management of Geo-Hydrological Hazards,
University of Florence, Italy

In the framework of the Scientific Bilateral Agreements

UNIFI-SEJONG and UNIFI-KIGAM

3rd Joint Seminar Korea-Italy

Modelling and early warning of landslides, new methods and technologies

Arcetri Labs of DST-UNIFI
Largo E. Fermi, 2
Florence

10 April 2017
Florence (Italy)

3rd Joint Seminar Korea-Italy
Florence, 10 April 2017

10:00-12:30 - Modelling and prediction

Chairman: Prof. Filippo CATANI - ***Associate Professor and UNESCO Chair Associate, University of Florence***

10:00-10:20 - Dr. Veronica TOFANI (UNIFI) - Field parametrisation and numerical modelling for the forecasting of landslides in real-time

10:20-10:40 - Dr. Jung-Hae CHOI (KIGAM) - An approach to landslide early warning based on field monitoring in Korea

10:40-11:00 - Prof. Hyuck-Jin PARK (SEJONG)— Application of fuzzy set approach in rainfall-induced shallow landslide susceptibility analysis

11:00-11:20 - Dr. Mauro ROSSI (IRPI) -Modelling of landslide phenomena and erosion processes triggered by meteo-climatic factors

11:20-11:40 - Prof. Alessandro SIMONI (UNIBO) - Runoff-generated debris flows: observation of initiation conditions and role of sediment availability at Cancia (North Eastern Italian Alps)

11:40-12:00 - Dr. Young-Suk SONG (KIGAM) - Estimation of suction stress and evaluation of unsaturated slope stability

12:00-12:20 - Dr. Ivan MARCHESINI (IRPI) - The Early Warning System for rainfall induced landslides: a work in progress

12:20-14:00- LIGHT LUNCH

14:00-16:30 - Remote Sensing Methods

Chairman: Dr. Veronica TOFANI - ***Assistant Professor, University of Florence***

14:00-14:20 - Dr. Federico RASPINI (UNIFI) - Satellite SAR information for landslide detection and monitoring

14:20-14:40 - Dr. Min-Jeong JO (SEJONG) - 3D measurement of geologic deformation and model parameter estimation based on SAR Interferometry

14:40-15:00 - Dr. Alessandro MONDINI (IRPI) - Spatial autocorrelation changes in multitemporal SAR images for landslide event detection

15:00-15:20 - Prof. Sang-Wan KIM (SEJONG) - InSAR-based displacement monitoring of subsidence and landslide

15:20-15:40 - Dr. Paolo FARINA (Geoapp, UNIFI) - Integration of new technologies to characterise and monitor unstable rock slopes in mining operations

15:40-16:30 Open discussion and round table