LAOS

Seminar on Sustainable Infrastructures and Green Technology for Geo-Disasters – 19 November 2012

This seminar is organized by the Council of Sciences and Technology (CST), Ministry of Public Works and Transport (MPWT), the State Enterprise for Survey Design and Material Testing (SDMT) in association with the Association of Geotechnical Societies in Southeast Asia (AGSSEA) and the Southeast Asian Geotechnical Society (SEAGS) with the support of the International Society for Soil Mechanics & Geotechnical Engineering (ISSMGE).

This is the third time that such seminar is held in Vientiane. The seminar is part of the touring lecture covering Cambodia, Malaysia, Philippines and Laos. The first seminar was held in January 2009. The second seminar held in August 2011

In this 3rd seminar the lecturers are Ir. Dr. Ooi Teik Aun, President of SEAGS and Immediate Past Chairman of AGSSEA, Professor Dennes T Bergado, Secretary-General of SEAGS, Professor S. S. Lin, President of Chinese Taipei Geotechnical Society (CTGS), Dr. Tawatchai Tanchaisawat, Associate Professor of Chiangmai University, and Ir. Yee Tack Weng, Technical Manager of TenCate Geosynthetics Asia. CTGS is a member society of AGSSEA and a direct member of ISSMGE.

The purpose of holding this seminar on sustainable Infrastructure and Green Technology for Geo-Disasters is to create awareness amongst the practicing engineers, especially young engineers and students who will be leaders of tomorrow in geotechnical engineering.

Global warming and Climate Change is real and threatened our children's future. There are instances of extreme events such as severe rainfall, flooding and slope failures. The recent extreme earthquake and tsunami events in New Zealand and Japan are wake-up calls for the need to mitigate geo-disasters and review in design practices so that they are sustainable. We need to mitigate the extreme events and rehabilitate slope failures, soil erosions and damages to roads, buildings and retaining structures.

The causes of slope failure due to soil erosion and intense rainfall are the results of climate change conditions due in part to increase in carbon footprint. Geotechnical engineering in dealing with the resolution of natural disasters will be explained through the different lectures as well as discussions amongst the participants and the lecturers in the seminar.

The lectures will also include case histories and application of advance techniques and technologies regarding the application of geotechnical engineering consisting of the use of sophisticated construction materials and techniques. Where the uses of proper reinforcement/improved ground materials on affected areas are applied, the damages will be greatly reduced. In addition strict controls and supervisions on applied techniques and works are equally important to ensure quality products are materialized.

Through the lectures and discussions, we will appreciate the uses of appropriate materials like geosynthetics and other materials in the improvement to the soil conditions for sustainable construction. The need for proper ground characterization is also emphasized as a pre-requisite to a robust and sustainable geotechnical engineering solution. It is hoped that this seminar will help to generate greater interest amongst the engineers in Laos in the practice of geotechnical engineering and technology transfer.

Group Photo showing the Lecturers and the Organizing Committee

Prof San-Shyan Lin receiving his Memento from Mr. Viengvisa Nguen